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Analyses of Natural Gases, 1980

By B. J. Moore

UNITED STATES DEPARTMENT OF THE INTERIOR

Information Circular 8856

Analyses of Natural Gases, 1980

By B. J. Moore

UNITED STATES DEPARTMENT OF THE INTERIOR
James G. Watt, Secretary
BUREAU OF MINES
Robert C. Horton, Director

CAB

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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ANALYSES OF NATURAL GASES, 1980

by

B. J. Moore [1]

INTRODUCTION

This publication contains analyses and related source data for 675 natural gas samples from wells and pipelines in 24 States and 5 foreign countries. The samples obtained and analyzed during calendar year 1980 are included in tables 1-4. Those samples included in tables 5-7 were collected during the years 1960 through 1979. However, permission to publish the analyses of those samples was not given until the past year when the operators were again contacted to seek release of the information. All of these samples were collected as a part of Bureau of Mines investigations of the occurrences of helium in natural gases of countries with free market economies. This survey has been conducted in the United States by the Bureau of Mines since 1917. In late 1965, the survey was expanded to include foreign gasfields. The analyses published herein were made by mass spectrometer and a special helium analysis apparatus, which are described in Bureau of Mines Bulletins 486[2] and 576.[3]

The results of the investigation of the occurrences of helium are published annually to make the information available as soon as possible to the gas industry and the general public. Twenty-two previous publications have presented the results of 12,152 gas analyses made prior to 1980. The first three, Bulletins 486,[4] 576,[5] and 617,[6] contain analyses and related source data on 5,218 gas samples collected from 1917 through 1980. The other

---

[1]Chief, Section of Helium Resources Evaluation, Branch of Helium Resources, Division of Helium Operations, Bureau of Mines, Amarillo, Tex.

[2]Anderson, C. C., and H. H. Hinson. Helium-Bearing Natural Gases of the United States. Analyses and Analytical Methods. BuMines Bull. 486, 1951, 141 pp.

[3]Boone, W. J., Jr. Helium-Bearing Natural Gases of the United States. Analyses and Analytical Methods. Supplement to Bulletin 486. BuMines Bull. 576, 1958. 117 pp.

[4]Work cited in footnote 2.

[5]Work cited in footnote 3.

[6]Munnerlyn, R. D., and R. D. Miller. Helium-Bearing Natural Gases of the United States Analyses. Second Supplement to Bulletin 486. BuMines Bull. 617, 1963, 93 pp.

19 publications,[7] which were issued as information circulars, supplement the three bulletins and contain 6,934 analyses of samples collected since 1960. This publication is the 20th publication supplementing the three bulletins.

In 1976, a compilation of the analyses made prior to 1975 was published by the National Technical Information Service of the U.S. Department of Commerce. This compilation, entitled "Analyses of Natural Gases, 1917-74," contains 10,562 analyses of gas samples from oil and gas wells and natural gas pipelines in 37 States and 23 foreign countries. The compilation is available from the National Technical Information Service, Springfield, Va. 22161. Catalog number of the publication is PB 251-202 and the price is $57.50.

In addition to being included in the publications, all published analyses and related information are available on a magnetic tape file. The tape is also available from the National Technical Information Service, and orders should refer to Bureau of Mines Tape PB 300-996 A/S, $125.

ACKNOWLEDGMENTS

The helium survey program is conducted by soliciting natural gas samples throughout the United States and other countries with free market economies. Without the assistance of the oil industry, State and national agencies, and many individuals engaged in oil and gas exploration and production, the helium survey with its present scope would be impossible.

---

[7]Miller, R. D., and G. P. Norrell. Analyses of Natural Gases of the United States, 1961. BuMines IC 8221, 1964, 148 pp.
_____. Analyses of Natural Gases of the United States, 1962. BuMines IC 8239, 1964, 120 pp.
_____. Analyses of Natural Gases of the United States, 1963. BuMines IC 8241, 1965, 102 pp.
Moore, B. J., R. D. Miller, and R. D. Shrewsbury. Analyses of Natural Gases of the United States, 1964. BuMines IC 8302, 1966, 144 pp.
Moore, B. J., and R. D. Shrewsbury. Analyses of Natural Gases of the United States, 1965. BuMines IC 8316, 1966, 181 pp.
_____. Analyses of Natural Gases, 1966. BuMines IC 8356, 1967, 130 pp.
_____. Analyses of Natural Gases, 1967. BuMines IC 8395, 1968, 187 pp.
Cardwell, L. E., and L. F. Benton. Analyses of Natural Gases, 1968. BuMines IC 8443, 1970, 169 pp.
_____. Analyses of Natural Gases, 1969. BuMines IC 8475, 1970, 134 pp.
_____. Analyses of Natural Gases, 1970. BuMines IC 8518, 1971, 130 pp.
_____. Analyses of Natural Gases, 1971. BuMines IC 8554, 1972, 163 pp.
_____. Analyses of Natural Gases, 1972. BuMines IC 8607, 1973, 104 pp.
Moore, B. J. Analyses of Natural Gases, 1973. BuMines IC 8658, 1974, 96 pp.
_____. Analyses of Natural Gases, 1974. BuMines IC 8684, 1975, 122 pp.
_____. Analyses of Natural Gases, 1975. BuMines IC 8717, 1976, 82 pp.
_____. Analyses of Natural Gases, 1976. BuMines IC 8749, 1977, 94 pp.
_____. Analyses of Natural Gases, 1977. BuMines IC 8780, 1978, 95 pp.
_____. Analyses of Natural Gases, 1978. BuMines IC 8810, 1979, 113 pp.
_____. Analyses of Natural Gases, 1979. BuMines IC 8833, 1980, 100 pp.

FIGURE 1. - Geologic provinces of the United States.

The analyses listed in the tables were made by the Section of Technical Services, Division of Helium Operations, Bureau of Mines, Amarillo, Tex. The list of analyses was produced through use of a computer by the Section of Automatic Data Processing, Division of Helium Operations, Bureau of Mines, Amarillo, Tex.

GEOLOGIC PROVINCES OF THE UNITED STATES

The tables include geologic province codes so that each sample source can be located within a specific geologic province as defined by the Committee on Statistics of Drilling of the American Association of Petroleum Geologists.[8] These provinces, which are given in the following list and shown in figure 1, are delineated by political boundaries for convenience and for accommodation of data processing equipment. The accompanying list and figure 1 are taken from the article cited in footnote 8. Not all of the provinces shown are gas-producing areas, so many of the codes are not used in this publication. In offshore areas, only one code is used for each State since State or Federal ownership is not always known. Only one code, 972, is used for all wells in Alaska, both onshore and offshore, because of the lack of information on the location of wells in that State.

Code	Province
100	New England province
110	Adirondack uplift
120	Atlantic Coast basin
130	South Georgia-North Florida sedimentary province
140	South Florida province
150	Piedmont-Blue Ridge province
160	Appalachian basin
200	Warrior basin
210	Mid-Gulf Coast basin
220	Gulf Coast basin
230	Arkla basin
240	Desha basin
250	Upper Mississippi embayment
260	East Texas basin
300	Cincinnati arch
305	Michigan basin
310	Wisconsin arch
315	Illinois basin
320	Sioux uplift
325	Iowa shelf
330	Lincoln anticline
335	Forest City basin
340	Ozark uplift

[8]Meyer, R. F. Geologic Provinces Code Map for Computer Use. AAPG Bull., v. 54/7, July 1970, pp. 1301-1305.

Code	Province
345	Arkoma basin
350	South Oklahoma folded belt province
355	Chautauqua platform
360	Anadarko basin
365	Cherokee basin
370	Nemaha anticline
375	Sedgwick basin
380	Salina basin
385	Central Kansas uplift
390	Chadron arch
395	Williston basin
400	Ouachita tectonic belt province
405	Kerr basin
410	Llano uplift
415	Strawn basin
420	Fort Worth syncline
425	Bend arch
430	Permian basin
435	Palo Duro basin
440	Amarillo arch
445	Sierra Grande uplift
450	Las Animas arch
455	Las Vegas-Raton basin
460	Estancia basin
465	Orogrande basin
470	Pedregosa basin
475	Basin-and-Range province
500	Sweetgrass arch
505	Montana folded belt province
510	Central Montana uplift
515	Powder River basin
520	Big Horn basin
525	Yellowstone province
530	Wind River basin
535	Green River basin
540	Denver basin
545	North Park basin
550	South Park basin
555	Eagle basin
560	San Luis basin
565	San Juan Mountain province
570	Uinta uplift
575	Uinta basin
580	San Juan basin
585	Paradox basin
590	Black Mesa basin
595	Piceance basin

Code	Province
600	Northern Cascade Range--Okanagan
605	Eastern Columbia basin
610	Idaho Mountains province
615	Snake River basin
620	Southern Oregon basin
625	Great Basin province
630	Wasatch uplift
635	Plateau sedimentary province
640	Mojave basin
645	Salton basin
650	Sierra Nevada province
700	Bellingham basin
705	Puget Sound province
710	Western Columbia basin
715	Klamath Mountains province
720	Eel River basin
725	Northern Coast Range province
730	Sacramento basin
735	Santa Cruz basin
740	Coastal basins
745	San Joaquin basin
750	Santa Maria basin
755	Ventura basin
760	Los Angeles basin
765	Capistrano basin
800	Heceta Island area
805	Keku Islands area
810	Gulf of Alaska basin
815	Copper River basin
820	Cook Inlet basin
830	Kandik province
835	Kobuk province
840	Koyukuk province
845	Bristol Bay basin
850	Bethel basin
855	Norton basin
860	Selawik basin
863	Yukon Flats basin
865	Lower Tanana basin
867	Middle Tanana basin
870	Upper Tanana basin
873	Galena basin
875	Innoko basin
877	Minchumina basin
880	Holitna basin
885	Artic Foothills province
890	Artic slope basin

Code	Province
900	Maine Atlantic offshore--general
901	Maine Atlantic offshore--State
902	Maine Atlantic offshore--Federal
903	New Hampshire Atlantic offshore--general
904	New Hampshire Atlantic offshore--State
905	New Hampshire Atlantic offshore--Federal
906	Massachusetts Atlantic offshore--general
907	Massachusetts Atlantic offshore--State
908	Massachusetts Atlantic offshore--Federal
909	Rhode Island Atlantic offshore--general
910	Rhode Island Atlantic offshore--State
911	Rhode Island Atlantic offshore--Federal
912	Connecticut Atlantic offshore--general
913	Connecticut Atlantic offshore--State
914	Connecticut Atlantic offshore--Federal
915	New York Atlantic offshore--general
916	New York Atlantic offshore--State
917	New York Atlantic offshore--Federal
918	New Jersey Atlantic offshore--general
919	New Jersey Atlantic offshore--State
920	New Jersey Atlantic offshore--Federal
921	Delaware Atlantic offshore--general
922	Delaware Atlantic offshore--State
923	Delaware Atlantic offshore--Federal
924	Maryland Atlantic offshore--general
925	Maryland Atlantic offshore--State
926	Maryland Atlantic offshore--Federal
927	Virginia Atlantic offshore--general
928	Virginia Atlantic offshore--State
929	Virginia Atlantic offshore--Federal
930	North Carolina Atlantic offshore--general
931	North Carolina Atlantic offshore--State
932	North Carolina Atlantic offshore--Federal
933	South Carolina Atlantic offshore--general
934	South Carolina Atlantic offshore--State
935	South Carolina Atlantic offshore--Federal
936	Georgia Atlantic offshore--general
937	Georgia Atlantic offshore--State
938	Georgia Atlantic offshore--Federal
939	Florida Atlantic offshore--general
940	Florida Atlantic offshore--State
941	Florida Atlantic offshore--Federal
942	Florida Gulf of Mexico offshore--general
943	Florida Gulf of Mexico offshore--State
944	Florida Gulf of Mexico offshore--Federal
945	Alabama Gulf of Mexico offshore--general
946	Alabama Gulf of Mexico offshore--State
947	Alabama Gulf of Mexico offshore--Federal
948	Mississippi Gulf of Mexico offshore--general

Code	Province
949	Mississippi Gulf of Mexico offshore--State
950	Mississippi Gulf of Mexico offshore--Federal
951	Louisiana Gulf of Mexico offshore--general
952	Louisiana Gulf of Mexico offshore--State
953	Louisiana Gulf of Mexico offshore--Federal
954	Texas Gulf of Mexico offshore--general
955	Texas Gulf of Mexico offshore--State
956	Texas Gulf of Mexico offshore--Federal
957	California Pacific offshore--general
958	California Pacific offshore--State
959	California Pacific offshore--Federal
960	Oregon Pacific offshore--general
961	Oregon Pacific offshore--State
962	Oregon Pacific offshore--Federal
963	Washington Pacific offshore--general
964	Washington Pacific offshore--State
965	Washington Pacific offshore--Federal
972	Alaska Arctic offshore--general
973	Alaska Arctic offshore--State
974	Alaska Arctic offshore--Federal
975	Alaska Bering Sea offshore--general
976	Alaska Bering Sea offshore--State
977	Alaska Bering Sea offshore--Federal
978	Alaska Pacific offshore--general
979	Alaska Pacific offshore--State
980	Alaska Pacific offshore--Federal
987	Minnesota Lake Superior offshore
988	Wisconsin Lake Superior offshore
989	Michigan Lake Superior offshore
990	Indiana Lake Michigan offshore
991	Illinois Lake Michigan offshore
992	Wisconsin Lake Michigan offshore
993	Michigan Lake Michigan offshore
994	Michigan Lake Huron offshore
995	Michigan Lake Erie offshore
996	Ohio Lake Erie offshore
997	Pennsylvania Lake Erie offshore
998	New York Lake Erie offshore
999	New York Lake Ontario offshore

TABLES

The following tables include the results of analyses and related source data from gas samples which are divided into seven groups as follows:

Table 1. - Samples from gas and oil wells in the United States during 1980.

Table 2. - Samples from pipelines in the United States during 1980.

Table 3. - Samples from gas and oil wells in foreign countries during 1980.

Table 4. - Samples from pipelines in foreign countries during 1980.

Table 5. - Samples from gas and oil wells in the United States during 1960-1979.

Table 6. - Samples from pipelines in the United States during 1960-1979.

Table 7. - Samples from gas and oil wells in foreign countries during 1960-1979.

The following list indicates the sources of the samples listed in the tables:

Source	Number of samples	Tables	Source	Number of samples	Tables
Alabama....	4	1, 6	Nebraska.....	4	1-2
Alaska.....	26	1, 5	New Jersey....	1	1
Arizona....	1	1, 5-6	New Mexico....	27	1-2, 5
Arkansas...	15		New York.....	6	1, 5
California.	14	1-2, 5	North Dakota..	3	1, 5
Colorado...	19	1-2, 5	Ohio.....	4	5
Kansas.....	48	1, 5-6	Oklahoma.....	90	1,5
Kentucky...	6	1, 5	Pennsylvania..	4	1, 5
Louisiana..	50	1, 5	Texas.....	243	1-2, 5-6
Michigan...	3	5	Utah.....	10	1-2, 5
Mississippi	13	1, 5	West Virginia.	25	1, 5
Montana....	5	1	Wyoming.....	34	1-2, 5
Australia..	2	4	Thailand.....	4	7
Bolivia....	8	3	United Kingdom	2	7
Canada.....	4	7			

All components of the analyses in the tables are reported to the nearest 0.1 percent, except helium, which is reported to the nearest 0.01 percent. The word "trace" is used to denote quantities of helium of less than 0.005 percent and quantities of other components of less than 0.05 percent.

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 1 SAMPLE 15925	INDEX 2 SAMPLE 16053	INDEX 3 SAMPLE 16054
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	LAMAR	LAMAR
FIELD	MUSGROVE CREEK	MAGEE LAKE	MAGEE LAKE
WELL NAME	SMITH.NO.32-14	SARAH C. SPROUSE NO. 1	SARAH C. SPROUSE NO. 1
LOCATION	SEC. 32, T14S, R12W	SEC. 30, T16S, R15W	SEC. 30, T16S, R15W
OWNER	GRACE PETROLEUM CORP.	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.
COMPLETED	08/28/79	NOT GIVEN	NOT GIVEN
SAMPLED	03/20/80	08/08/80	08/08/80
FORMATION	MISS-CARTER	MISS-CARTER	CRET-LEWIS
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	2950	4265	4820
WELLHEAD PRESSURE,PSIG	1099	900	430
OPEN FLOW, MCFD	4739	2200	665
COMPONENT, MOLE PCT			
METHANE	97.5	91.6	87.1
ETHANE	0.9	4.2	7.3
PROPANE	0.1	1.4	2.4
N-BUTANE	0.1	0.4	0.6
ISOBUTANE	0.0	0.3	0.3
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	1.1	1.0	1.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.5
HELIUM	0.08	0.11	0.08
HEATING VALUE*	1010	1094	1137
SPECIFIC GRAVITY	0.564	0.621	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 4 SAMPLE 15889	INDEX 5 SAMPLE 15890	INDEX 6 SAMPLE 15891
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NORTHWESTERN	NORTHWESTERN	NORTHWESTERN
FIELD	BARROW E	BARROW E	BARROW E
WELL NAME	WELL NO. 19	WELL NO. 12	WELL NO. 17
LOCATION	SEC. 23, T22N, R17W	SEC. 23, T22N, R17W	SEC. 30, T22N, R16W
OWNER	HUSKY OIL NPR OPERATIONS INC	HUSKY OIL NPR OPERATIONS INC	HUSKY OIL NPR OPERATIONS INC
COMPLETED	05/16/78	05/04/74	04/13/78
SAMPLED	01/17/80	01/17/80	01/17/80
FORMATION	JURA-BARROW	JURA-BARROW	JURA-BARROW
GEOLOGIC PROVINCE CODE	890	890	890
DEPTH, FEET	2050	2050	2100
WELLHEAD PRESSURE, PSIG	1600	1000	1000
OPEN FLOW, MCFD	7220	360	2960
COMPONENT, MOLE PCT			
METHANE	86.1	83.5	94.9
ETHANE	0.5	0.4	0.9
PROPANE	TRACE	0.2	0.3
N-BUTANE	0.1	0.7	0.2
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	TRACE	0.6	0.1
ISOPENTANE	0.1	0.8	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.5	0.2
NITROGEN	11.8	8.8	3.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	1.22	4.22	0.13
HEATING VALUE*	889	974	1014
SPECIFIC GRAVITY	0.604	0.630	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 7 SAMPLE 15892	INDEX 8 SAMPLE 15997	INDEX 9 SAMPLE 16105
STATE	ALASKA	ARKANSAS	ARKANSAS
COUNTY	NORTHWESTERN	FRANKLIN	JOHNSON
FIELD	BARROW E	ROCK CREEK	COAL HILL
WELL NAME	WELL NO. 14	STARDIUANT NO. 1-15	GREENWOOD NO. 2-31
LOCATION	SEC. 25, T22N, R17W	SEC. 15, T11N, R26W	SEC. 31, T10N, R25W
OWNER	HUSKY OIL NPR OPERATIONS INC	SEECO INC.	SOUTHERN UNION EXPL. CO.
COMPLETED	03/03/77	03/19/80	01/15/80
SAMPLED	01/17/80	07/02/80	10/22/80
FORMATION	NOT GIVEN	PENN-MORROW	PENN-DUNN A
GEOLOGIC PROVINCE CODE	890	345	345
DEPTH, FEET	2050	2258	3420
WELLHEAD PRESSURE,PSIG	1000	596	1141
OPEN FLOW, MCFD	3700	925	6449
COMPONENT, MOLE PCT			
METHANE	94.3	97.3	98.5
ETHANE	2.2	1.3	0.8
PROPANE	2.0	0.2	0.1
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.0	1.0	0.3
OXYGEN	0.6	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.05	0.12	0.12
HEATING VALUE*	1074	1014	1015
SPECIFIC GRAVITY	0.600	0.568	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 10 SAMPLE 15938	INDEX 11 SAMPLE 15955	INDEX 12 SAMPLE 15956
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	POPE	POPE
FIELD	PRAIRIE VIEW	KNOXVILLE	KNOXVILLE
WELL NAME	MIDLAND OIL CORP. NO. 1	MARTIN NO. 1	MARTIN NO. 1
LOCATION	SEC. 22, T8N, R24W	SEC. 32, T9N, R21W	SEC. 32, T9N, R21W
OWNER	SANTA FE ENERGY CO.	SAMSON RESOURCES CO.	SAMSON RESOURCES CO.
COMPLETED	NOT GIVEN	11/15/79	11/15/79
SAMPLED	04/18/80	04/24/80	04/24/80
FORMATION	PENN-ORR	PENN-ARECI	PENN-ARECI
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6477	3710	3730
WELLHEAD PRESSURE,PSIG	650	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2113	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.9	93.6	83.6
ETHANE	0.9	1.6	1.4
PROPANE	0.1	0.2	0.2
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	0.9	3.5	11.5
OXYGEN	0.0	0.8	3.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	TRACE	TRACE
HELIUM	0.27	0.14	0.12
HEATING VALUE*	988	982	877
SPECIFIC GRAVITY	0.591	0.582	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 13 SAMPLE 15964	INDEX 14 SAMPLE 15965	INDEX 15 SAMPLE 16087
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	MORELAND	MORELAND	MORELAND
WELL NAME	W. G. BLACKWELL NO. 1	W. G. BLACKWELL NO. 1	CAMMIE VIRDEN NO. 9-1
LOCATION	SEC. 7, T8N, R19W	SEC. 7, T8N, R19W	SEC. 9, T8N, R19W
OWNER	CHARLES E. MCRAY & ASSOC.	CHARLES E. MCRAY & ASSOC.	GETTY OIL CO.
COMPLETED	03/14/80	03/14/80	NOT GIVEN
SAMPLED	05/16/80	05/16/80	09/25/80
FORMATION	-CLINE	PENN-MCGUIRE	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5535	4358	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2025	1425	NOT GIVEN
OPEN FLOW, MCFD	1883	9998	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.5	97.1	91.5
ETHANE	1.1	1.0	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.8	0.9	6.7
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.3
HELIUM	0.10	0.09	0.08
HEATING VALUE*	1010	1004	947
SPECIFIC GRAVITY	0.566	0.570	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 16 SAMPLE 15940	INDEX 17 SAMPLE 16066	INDEX 18 SAMPLE 16067
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	HOLLIS LAKE	WITCHERVILLE	WITCHERVILLE
WELL NAME	FT CHAFFEE FEDERAL NO.2	FRANKLIN-HOLLAND NO. 1	FRANKLIN HOLLAND NO. 1
LOCATION	SEC.26, R31W, R31W	SEC.31,T6N,R30W	SEC.31,T6N,R30W
OWNER	GULF OIL EXPL. & PROD. CO.	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.
COMPLETED	01/29/80	07/21/80	07/21/80
SAMPLED	04/16/80	09/16/80	09/16/80
FORMATION	PENN-SPIRO	PENN-BORUM	PENN-TURNER
GEOLOGIC PROVINCE CODE	345	345	850
DEPTH, FEET	5737	4500	3573
WELLHEAD PRESSURE,PSIG	987	760	NOT GIVEN
OPEN FLOW, MCFD	2803	5428	5598
COMPONENT, MOLE PCT			
METHANE	96.5	96.9	95.2
ETHANE	1.3	1.1	1.9
PROPANE	0.2	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.4	1.7	2.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	TRACE	TRACE
HELIUM	0.07	0.08	0.05
HEATING VALUE*	1015	1004	1004
SPECIFIC GRAVITY	0.579	0.567	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 19 SAMPLE 15969	INDEX 20 SAMPLE 15996	INDEX 21 SAMPLE 16084
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MERCED	SOLANO	TEHAMA
FIELD	O'NEILL FOREBAY DAM	LINDSEY SLOUGH	RICE CREEK E
WELL NAME	GAS SEEP	HASTING RANCH NO.1-21	BETTENCOURT NO.1
LOCATION	DOWNSTREAM OF DAM	SEC. 21, T 5N, R 2E	SEC. 28, T23N, R2W
OWNER	U.S. GOVERNMENT	MCOR O&G CORP.	OXY PETROLEUM, INC.
COMPLETED	NOT GIVEN	01/28/80	NOT GIVEN
SAMPLED	05/06/80	06/27/80	09/29/80
FORMATION	-ALLUVIAN	CRET-PETERSON	CRET-FORBES
GEOLOGIC PROVINCE CODE	745	730	730
DEPTH, FEET	2	9335	4946
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3250	2220
OPEN FLOW, MCFD	NOT GIVEN	16000	2762
COMPONENT, MOLE PCT			
METHANE	1.1	91.7	94.5
ETHANE	0.1	4.3	0.4
PROPANE	TRACE	1.5	TRACE
N-BUTANE	TRACE	0.3	TRACE
ISOBUTANE	0.1	0.2	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	94.7	1.4	4.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.8	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	0.1	TRACE
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	21	1083	964
SPECIFIC GRAVITY	0.985	0.615	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 22 SAMPLE 15988	INDEX 23 SAMPLE 15989	INDEX 24 SAMPLE 15943
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	BAXTER PASS S	BAXTER PASS S	BRIDLE
WELL NAME	UNIT NO. 2-20	GOVERNMENT BUTTRAM NO. 1	FEDERAL NO. 6-13
LOCATION	SEC. 20, T 5S, R102W	SEC. 30, T 5S, R102W	SEC. 6, T8S, R104W
OWNER	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.	TENNECO OIL EXPL. & PROD.
COMPLETED	10/26/59	12/22/58	05/19/79
SAMPLED	06/17/80	06/17/80	04/15/80
FORMATION	JURA-MORRISON	JURA-MORRISON	CRET-DAKOTA & JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6959	5934	3724
WELLHEAD PRESSURE,PSIG	1280	1537	NOT GIVEN
OPEN FLOW, MCFD	933	1000	3752
COMPONENT, MOLE PCT			
METHANE	61.1	59.9	80.5
ETHANE	3.1	3.3	4.8
PROPANE	1.0	1.2	1.5
N-BUTANE	0.4	0.5	0.3
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	28.9	27.9	10.1
OXYGEN	0.0	TRACE	0.5
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.8	5.3	0.7
HELIUM	0.84	0.86	0.44
HEATING VALUE*	751	755	1001
SPECIFIC GRAVITY	0.757	0.774	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 25 SAMPLE 15878	INDEX 26 SAMPLE 16130	INDEX 27 SAMPLE 15928
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	LA PLATA
FIELD	DOUGLAS CREEK	SOUTH CANYON	IGNACIO BLANCO
WELL NAME	FEDERAL NO. 1-15	FEDERAL NO. 9-6	SOUTHERN UTE NO. 30-1
LOCATION	SEC. 15, T8S, R105W	SEC. 9, T7S, R104W	SEC. 30, T33N, R9W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ARCO OIL & GAS CO.
COMPLETED	06/09/79	NOT GIVEN	08/23/78
SAMPLED	01/08/80	11/06/80	03/31/80
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	580
DEPTH, FEET	3738	6320	5109
WELLHEAD PRESSURE,PSIG	910	900	1106
OPEN FLOW, MCFD	740	3000	2140
COMPONENT, MOLE PCT			
METHANE	90.8	65.4	95.2
ETHANE	4.6	3.4	1.8
PROPANE	1.4	1.0	0.2
N-BUTANE	0.3	0.3	0.1
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.2	24.1	0.1
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	4.7	2.5
HELIUM	0.10	0.42	TRACE
HEATING VALUE*	1077	777	1010
SPECIFIC GRAVITY	0.621	0.737	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 28 SAMPLE 15929	INDEX 29 SAMPLE 15957	INDEX 30 SAMPLE 16098
STATE	COLORADO	COLORADO	KANSAS
COUNTY	LA PLATA	RIO BLANCO	BARBER
FIELD	IGNACIO BLANCO	BAXTER PASS	ADAMS
WELL NAME	SOUTHERN UTE NO. 30-1	GOVERNMENT SLOANE NO. 2	SIMPSON NO. 1
LOCATION	SEC. 30, T33N, R9W	SEC. 27, T4S, R103W	SEC. 32, T31S, R12W
OWNER	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.	ABERCROMBIE DRILLING, INC.
COMPLETED	08/23/78	07/03/77	NOT GIVEN
SAMPLED	03/31/80	04/27/80	10/16/80
FORMATION	CRET-PICTURED CLIFF	JURA-MORRISON	MISS-
GEOLOGIC PROVINCE CODE	530	560	375
DEPTH, FEET	2868	6820	4200
WELLHEAD PRESSURE,PSIG	1333	1050	NOT GIVEN
OPEN FLOW, MCFD	269	142	11100
COMPONENT, MOLE PCT			
METHANE	90.6	74.9	77.8
ETHANE	4.5	4.3	7.2
PROPANE	1.2	1.8	3.9
N-BUTANE	0.2	0.6	1.0
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.2	14.9	8.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	1.1	TRACE
HELIUM	TRACE	0.77	0.43
HEATING VALUE*	1071	960	1104
SPECIFIC GRAVITY	0.634	0.698	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 31 SAMPLE 16015	INDEX 32 SAMPLE 15981	INDEX 33 SAMPLE 15980
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	COMANCHE	KINGMAN
FIELD	CEDAR	WILDCAT	WILDCAT
WELL NAME	MILLER NO. 1	HAAS NO. 1	KATZER NO. 1
LOCATION	SEC. 36, T33S, R10W	SEC. 19, T34S, R17W	SEC. 10, T30S, R10W
OWNER	GEORGE R. JONES	GEORGE R. JONES	RAYMOND OIL CO., INC.
COMPLETED	01/09/80	01/19/80	09/01/79
SAMPLED	07/10/80	06/11/80	10/06/80
FORMATION	MISS-	MISS-	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	375	360	375
DEPTH, FEET	4569	5238	3156
WELLHEAD PRESSURE,PSIG	1600	1680	940
OPEN FLOW, MCFD	2015	2443	5400
COMPONENT, MOLE PCT			
METHANE	88.1	91.1	76.5
ETHANE	5.3	3.1	3.8
PROPANE	2.2	1.0	1.9
N-BUTANE	0.7	0.3	0.6
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.4	3.8	15.1
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.13	0.13	0.36
HEATING VALUE*	1109	1035	954
SPECIFIC GRAVITY	0.642	0.612	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 34 SAMPLE 16107	INDEX 35 SAMPLE 16138	INDEX 36 SAMPLE 15983
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	PRATT	PRATT
FIELD	ALFORD	HOPEWELL	HOPWELL
WELL NAME	KEENAN NO. 1	DOGGETT NO. 4	STAMBAUGH "A" NO. 1
LOCATION	SEC. 20, T30S, R19W	SEC. 17, T26S, R5W	SEC. 8, T26S, R15W
OWNER	J. MARK RICHARDSON	MULL DRILLING CO.	CITIES SERVICE CO.
COMPLETED	NOT GIVEN	05/23/80	03/18/80
SAMPLED	10/22/80	12/04/80	06/09/80
FORMATION	MISS-	MISS-	MISS-CHERT
GEOLOGIC PROVINCE CODE	360	385	385
DEPTH, FEET	5090	4350	4357
WELLHEAD PRESSURE,PSIG	700	950	1040
OPEN FLOW, MCFD	5800	9000	4260
COMPONENT, MOLE PCT			
METHANE	86.7	88.3	88.0
ETHANE	3.8	3.7	3.8
PROPANE	1.0	1.5	1.4
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	7.1	4.7	4.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.37	0.58	0.62
HEATING VALUE*	1006	1046	1051
SPECIFIC GRAVITY	0.627	0.627	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 37 SAMPLE 15884	INDEX 38 SAMPLE 15905	INDEX 39 SAMPLE 15902
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	SEWARD	SEWARD
FIELD	FITZPATRICK	ADAMSON	KNEELAND SW
WELL NAME	DILL NO. 1	POWELL "D" NO. 1	YORK NO. 1
LOCATION	SEC. 24, T21S, R9W	SEC. 26, T34S, R34W	SEC. 27, T24S, R31W
OWNER	LERSACK OIL PRODUCTION	ANADARKO PRODUCTION CO.	KANSAS ENERGY INVESTMENT
COMPLETED	NOT GIVEN	12/21/79	NOT GIVEN
SAMPLED	01/24/80	02/21/80	02/15/80
FORMATION	MISS-	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	360	360
DEPTH, FEET	3319	6098	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1023	NOT GIVEN	1575
OPEN FLOW, MCFD	4518	4260	3664
COMPONENT, MOLE PCT			
METHANE	65.7	80.3	85.3
ETHANE	13.3	4.6	4.8
PROPANE	9.7	2.6	2.5
N-BUTANE	3.3	0.8	0.7
ISOBUTANE	1.5	0.4	0.3
N-PENTANE	1.0	0.3	0.2
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	4.3	9.9	3.1
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	2.7
HELIUM	0.29	0.17	0.13
HEATING VALUE*	1402	1053	1067
SPECIFIC GRAVITY	0.846	0.685	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 40 SAMPLE 16141	INDEX 41 SAMPLE 15911	INDEX 42 SAMPLE 16139
STATE	KANSAS	KANSAS	KENTUCKY
COUNTY	SEWARD	SUMNER	PERRY
FIELD	NOT GIVEN	STUHLSATZ	COCKEREL
WELL NAME	HACKER UNIT NO. 2-1	JORDAN TRUST NO. 1	N. CLAIBOURNE NO. 7309
LOCATION	SEC. 1, T34S, R34W	SEC. 29, T30S, R2W	CARTER COORDINATE 7-K-76
OWNER	CABOT CORP.	STELBAR OIL CORP.	KENTUCKY W. VIRGINIA GAS CO.
COMPLETED	08/01/80	05/18/79	05/14/80
SAMPLED	12/03/80	02/31/80	11/26/80
FORMATION	PENN-MORROW	PENN-STALNAKER	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	360	375	160
DEPTH, FEET	6028	2812	1756
WELLHEAD PRESSURE,PSIG	1620	991	525
OPEN FLOW, MCFD	5000	4451	4169
COMPONENT, MOLE PCT			
METHANE	83.4	83.5	81.1
ETHANE	5.1	4.8	8.9
PROPANE	3.4	2.5	3.2
N-BUTANE	1.2	0.9	0.7
ISOBUTANE	0.6	0.3	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	5.1	6.5	5.1
OXYGEN	0.0	0.5	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.18	0.20	0.35
HEATING VALUE*	1129	1069	1108
SPECIFIC GRAVITY	0.683	0.666	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 43 SAMPLE 16075	INDEX 44 SAMPLE 16102	INDEX 45 SAMPLE 16150
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	CALCASIEU	CAMERON
FIELD	LUCKY	CHLOE	JOHNSON BAYOU
WELL NAME	TOBIN NO. 1	TOBILAR INC. NO. 1	9000 RA SAU,SCHUH NO. 1
LOCATION	SEC. 18, T15N, R6W	SEC. 36, T9S, R8W	SEC. 5, T15S, R14W
OWNER	PLACID OIL CO.	MCMORAN EXPLORATION CO.	GREAT SOUTHERN O&G CO. INC.
COMPLETED	08/22/79	10/07/88	02/13/80
SAMPLED	09/22/80	10/17/80	12/06/80
FORMATION	JURA-COTTON VALLEY	MIOC-HACKBERRY	MIOC-
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	9987	11592	9000
WELLHEAD PRESSURE,PSIG	4100	5100	3100
OPEN FLOW, MCFD	8000	2000	400
COMPONENT, MOLE PCT			
METHANE	94.9	91.1	90.6
ETHANE	1.3	5.3	4.4
PROPANE	0.2	1.4	1.6
N-BUTANE	0.1	0.3	0.3
ISOBUTANE	0.1	0.3	0.7
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	0.1	0.2	0.8
NITROGEN	0.6	0.3	0.6
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	0.5	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1002	1101	1145
SPECIFIC GRAVITY	0.597	0.622	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 46 SAMPLE 15924	INDEX 47 SAMPLE 15913	INDEX 48 SAMPLE 16046
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	E. BATON ROUGE	IBERVILLE
FIELD	LAKE ARTHUR SW	PORT HUDSON	MARINGOUIN
WELL NAME	DIXIE RICE NO. 1	GEORGIA PACIFIC NO. 1	E. G. HYNES ET AL NO. 1
LOCATION	SEC. 2, T12S, R3W	SEC. 64, T4S, R2W	SEC. 98, T7S, R9E
OWNER	AMERICAN QUASAR PET. CO.	AMOCO PRODUCING CO.	RIO BRAVO OIL CO.
COMPLETED	01/07/80	12/17/77	08/31/78
SAMPLED	03/14/80	02/28/80	08/11/80
FORMATION	-ZWAN	CRET-TUSCALOOSA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12510	16616	9402
WELLHEAD PRESSURE,PSIG	2400	4925	3400
OPEN FLOW, MCFD	4000	9300	1000
COMPONENT, MOLE PCT			
METHANE	89.7	83.7	91.1
ETHANE	5.3	4.3	3.8
PROPANE	2.1	1.7	1.9
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.9	0.5	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	0.1	1.7	1.0
OXYGEN	0.0	0.3	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	6.3	TRACE
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1136	1043	1123
SPECIFIC GRAVITY	0.645	0.696	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 49 SAMPLE 15883	INDEX 50 SAMPLE 15935	INDEX 51 SAMPLE 16026
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JACKSON	LAFOURCHE	PLAQUEMINES
FIELD	DANVILLE	CUT OFF	DRAKES BAY
WELL NAME	HODGE-HUNT NO. 1	E. P. BRAND NO. 1	LL&E NO. 1
LOCATION	SEC. 30, T14N, R4W	SEC. 3, T18S, R21E	SEC. 33, T20S, R29E
OWNER	JUSTISS-MEARS OIL CO.	MCALESTER FUEL CO.	C&K PETROLEUM, INC.
COMPLETED	09/17/79	12/28/78	01/10/78
SAMPLED	01/16/80	04/10/80	07/30/80
FORMATION	CRET-HOSSTON	MIOC-UL-2	MIOC-
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	8443	13867	10732
WELLHEAD PRESSURE,PSIG	1550	9160	1000
OPEN FLOW, MCFD	1581	200000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.1	94.9	95.7
ETHANE	0.2	2.9	1.6
PROPANE	0.1	0.7	0.8
N-BUTANE	0.0	0.2	0.3
ISOBUTANE	0.0	0.2	0.2
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	2.4	0.3	0.4
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	0.5	0.4
HELIUM	0.05	TRACE	0.01
HEATING VALUE*	970	1059	1063
SPECIFIC GRAVITY	0.587	0.594	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 52 SAMPLE 16057	INDEX 53 SAMPLE 16055	INDEX 54 SAMPLE 15948
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	POINT COUPEE	ST. BERNARD	VERMILION
FIELD	JUDGE DIGBY	RIGOLETS	FLORENCE S
WELL NAME	LE BLANC-LE JUENE NO. 1	STATE LEASE 6651 NO. 2	E. M. WATKINS NO. 33
LOCATION	SEC. 65, T5S, R10E	T11S, R16E, LAKE BORGNE	SEC. 25, T13S, R2W
OWNER	CHEVRON U.S.A. INC.	CHEVRON U.S.A. INC.	AMOCO PRODUCTION CO.
COMPLETED	09/14/79	05/02/80	07/12/79
SAMPLED	08/26/80	08/20/80	04/02/80
FORMATION	CRET-TUSCALOOSA	NOT GIVEN	-P-3 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	20490	13777	11028
WELLHEAD PRESSURE,PSIG	10160	3200	3800
OPEN FLOW, MCFD	17260	1700	1000
COMPONENT, MOLE PCT			
METHANE	89.8	86.3	95.1
ETHANE	2.2	6.1	2.4
PROPANE	0.4	2.3	0.7
N-BUTANE	0.1	0.6	0.2
ISOBUTANE	0.1	0.4	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.2	0.9	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.0	2.8	0.6
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	976	1104	1056
SPECIFIC GRAVITY	0.646	0.666	0.595

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 55 SAMPLE 15978	INDEX 56 SAMPLE 15909	INDEX 57 SAMPLE 15910
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	CLAY	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	WILDCAT	CARSON	CARSON
WELL NAME	JAMES C. FOSTER NO. 1	MAGNOLIA NO. 1	MAGNOLIA NO. 1
LOCATION	SEC. 29, T16S, R6E	SEC. 11, T7N, R18W	SEC. 11, T7N, R18W
OWNER	SHELL OIL CO.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	NOT GIVEN	10/--/78	10/99/78
SAMPLED	NOT GIVEN	02/24/80	02/24/80
FORMATION	CRET-LEWIS	CRET-HOSSTON	-SINCLAIR
GEOLOGIC PROVINCE CODE	200	210	210
DEPTH, FEET	10310	14766	14605
WELLHEAD PRESSURE,PSIG	996	4600	3237
OPEN FLOW, MCFD	2610	1600	5300
COMPONENT, MOLE PCT			
METHANE	91.5	88.5	93.0
ETHANE	5.5	3.7	1.5
PROPANE	1.3	1.5	0.4
N-BUTANE	0.3	0.7	0.2
ISOBUTANE	0.2	0.5	0.1
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.3	1.4	1.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	2.9	2.6
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1090	1083	1008
SPECIFIC GRAVITY	0.614	0.659	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 56 SAMPLE 16033	INDEX 59 SAMPLE 15949	INDEX 60 SAMPLE 15968
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON DAVIS	JEFFERSON DAVIS	LAMAR
FIELD	GREEN'S CREEK	GREENS CREEK	TATUM'S CAMP
WELL NAME	W. H. LANGSTON NO. 1	DALE UNIT 8-10 NO. 1	ROSS BEATTY NO. 8-7
LOCATION	SEC. 4, T5N, R19W	SEC. 8, T5N, R19W	SEC. 8, T3N, R15W
OWNER	MARION CORP.	HARKINS & CO.	SUN GAS CO.
COMPLETED	10/10/79	09/22/79	07/19/79
SAMPLED	08/11/80	04/22/80	05/27/80
FORMATION	CRET-SLIGO	CRET-HOSSTON	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	15780	16272	15699
WELLHEAD PRESSURE,PSIG	6000	5800	5200
OPEN FLOW, MCFD	3400	5500	3843
COMPONENT, MOLE PCT			
METHANE	94.0	89.0	90.3
ETHANE	0.3	0.3	0.8
PROPANE	0.1	0.1	0.4
N-BUTANE	0.1	0.1	0.3
ISOBUTANE	TRACE	0.1	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	1.2	4.4	2.3
OXYGEN	0.0	0.9	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.1	4.8	4.8
HELIUM	0.03	0.02	0.03
HEATING VALUE*	969	935	997
SPECIFIC GRAVITY	0.605	0.639	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 61 SAMPLE 15931	INDEX 62 SAMPLE 15993	INDEX 63 SAMPLE 15880
STATE	MISSISSIPPI	MONTANA	MONTANA
COUNTY	LOWNDES	BLAINE	CHOUTEAU
FIELD	CALEDONIA	BLACK COULEE	CHIP CREEK
WELL NAME	SMITH NO. 1-4	STATE NO. 14-36	STATE NO. 2-16
LOCATION	SEC. 4, T16S, R17W	SEC. 36, T32N, R18E	SEC. 16, T26N, R17E
OWNER	ELF AQUITAINE OIL & GAS	MONTANA POWER CO.	CANKEE OIL & GAS CO.
COMPLETED	12/23/79	12/26/79	08/29/79
SAMPLED	03/25/80	06/24/80	01/10/80
FORMATION	MISS-CARTER	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	200	395	500
DEPTH, FEET	4652	1148	1444
WELLHEAD PRESSURE,PSIG	1860	349	389
OPEN FLOW, MCFD	2700	3215	2125
COMPONENT, MOLE PCT			
METHANE	94.5	95.6	91.4
ETHANE	3.0	0.5	0.4
PROPANE	0.2	0.1	0.1
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	0.2	TRACE	0.0
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	1.0	3.6	7.7
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.10	0.08	0.13
HEATING VALUE*	1040	980	939
SPECIFIC GRAVITY	0.590	0.573	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 64 SAMPLE 16153	INDEX 65 SAMPLE 15966	INDEX 66 SAMPLE 16014
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	LIBERTY	TOOLE
FIELD	GILDFORD	OBRIENS COULEE	KEVIN-SUNBURST
WELL NAME	ARONUW NO. 1-7	STATE NO. 6-17	POTLATCH O&R NCT-NO. 1
LOCATION	SEC. 7, T33N, R11E	SEC. 17, T35N, R7E	SEC. 29, T34N, R1W
OWNER	LARIO OIL AND GAS CO.	MONTANA POWER CO.	TEXACO INC.
COMPLETED	12/16/80	05/19/80	10/20/79
SAMPLED	12/17/80	05/16/80	07/17/80
FORMATION	JURA-SAWTOOTH	-WHITE SPECS	DEVO-DUPEROW
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3489	1752	2959
WELLHEAD PRESSURE,PSIG	1594	571	730
OPEN FLOW, MCFD	4855	1630	10000
COMPONENT, MOLE PCT			
METHANE	96.6	91.2	5.4
ETHANE	0.1	0.4	0.5
PROPANE	0.1	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.2	8.1	15.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.1	77.1
HELIUM	0.02	0.16	0.87
HEATING VALUE*	1008	934	67
SPECIFIC GRAVITY	0.586	0.592	1.370

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 67 SAMPLE 16072	INDEX 68 SAMPLE 16073	INDEX 69 SAMPLE 15967
STATE	NEBRASKA	NEBRASKA	NEW JERSEY
COUNTY	LINCOLN	LINCOLN	OFFSHORE
FIELD	WILDCAT	WILDCAT	MID ATLANTIC
WELL NAME	BROWN NO. 2	BROWN NO. 2	FEDERAL WATERS N.J. 18-3
LOCATION	SEC. 14, T16N, R33W	SEC. 14, T16N, R33W	BLK. 598, OCS-A-0028
OWNER	MARSHALL R. YOUNG OIL CO.	MARSHALL R. YOUNG OIL CO.	TEXACO INC.
COMPLETED	10/10/79	10/10/79	05/14/80
SAMPLED	09/11/80	09/11/80	05/14/80
FORMATION	CRET-DAKOTA	CRET-NIOBRARA	NOT GIVEN
GEOLOGIC PROVINCE CODE	390	390	120
DEPTH, FEET	1938	1272	12974
WELLHEAD PRESSURE,PSIG	300	400	10
OPEN FLOW, MCFD	3000	174	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.6	63.8	94.1
ETHANE	0.3	0.6	2.0
PROPANE	TRACE	0.1	0.8
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	35.4	35.1	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	1.7
HELIUM	0.31	0.15	0.02
HEATING VALUE*	655	660	1018
SPECIFIC GRAVITY	0.704	0.703	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 70 SAMPLE 16064	INDEX 71 SAMPLE 16145	INDEX 72 SAMPLE 15918
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	LEA	LEA
FIELD	TURKEY TRACK	BELL LAKE M.	BLINEBRY
WELL NAME	STATE HL11 NO. 1	BELL LAKE NO. 1	OLLIE J. BOYD NO. 2
LOCATION	SEC. 11, T19S, R29E	SEC. 18, T23S, R34E	SEC. 23, T22S, R37E
OWNER	TENNECO OIL CO.	BTA OIL PRODUCERS	ARCO OIL & GAS CO.
COMPLETED	11/09/79	05/20/80	07/26/77
SAMPLED	08/28/80	12/08/80	03/14/80
FORMATION	PENN-ATOKA	DEVO-	PERM-BLINEBRY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10800	14660	5368
WELLHEAD PRESSURE,PSIG	3500	NOT GIVEN	571
OPEN FLOW, MCFD	4836	4819	2609
COMPONENT, MOLE PCT			
METHANE	88.1	92.7	81.0
ETHANE	6.5	2.8	9.8
PROPANE	2.3	0.6	4.6
N-BUTANE	0.5	TRACE	1.3
ISOBUTANE	0.4	0.1	0.6
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.2	1.9	1.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.3	1.4	0.0
HELIUM	0.03	0.07	0.03
HEATING VALUE*	1130	1022	1215
SPECIFIC GRAVITY	0.646	0.604	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 73 SAMPLE 15923	INDEX 74 SAMPLE 16092	INDEX 75 SAMPLE 16108
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	RIO ARRIBA
FIELD	BLINEBRY OIL	NOT GIVEN	GOBERNADOR
WELL NAME	S. J. SARKEY NO. 1	STATE NO. 1	SAN JUAN 29-5 UNIT NO. 97
LOCATION	SEC. 26, T16S, R37E	SEC. 2, T19S, R34E	SEC. 15, T29N, R5W
OWNER	ARCO OIL & GAS CO.	KNOX INDUSTRIES, INC.	NORTHWEST PIPELINE CORP.
COMPLETED	04/12/49	05/21/80	06/18/80
SAMPLED	03/21/80	10/13/80	10/22/80
FORMATION	PERM-BLINEBRY	PENN-MORROW	CRET-PICTURED CLIFF
GEOLOGIC PROVINCE CODE	430	430	580
DEPTH, FEET	5746	13571	3782
WELLHEAD PRESSURE,PSIG	325	4216	953
OPEN FLOW, MCFD	60	8090	3047
COMPONENT, MOLE PCT			
METHANE	79.9	55.3	89.2
ETHANE	9.9	21.6	5.3
PROPANE	4.6	12.6	2.6
N-BUTANE	1.2	2.8	0.7
ISOBUTANE	0.7	1.7	0.4
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.7	0.6	0.1
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	0.7	0.3	0.1
NITROGEN	1.7	3.1	0.9
OXYGEN	TRACE	0.9	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.6	0.3
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1255	1488	1121
SPECIFIC GRAVITY	0.725	0.908	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 76 SAMPLE 16013	INDEX 77 SAMPLE 15914	INDEX 78 SAMPLE 15915
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLOOMFIELD	NAVAJO CITY	NAVAJO CITY
WELL NAME	DAVIS GAS COM-G NO. 1	LIVELY NO. 7Y	LIVELY NO. 7Y
LOCATION	SEC. 27, T29N, R11W	SEC. 35, T30N, R8W	SEC. 35, T30N, R8W
OWNER	AMOCO PRODUCTION CO.	LIVELY EXPLORATION CO.	LIVELY EXPLORATION CO.
COMPLETED	05/--/80	04/19/74	04/19/74
SAMPLED	07/17/80	03/06/80	03/06/80
FORMATION	CRET-CHACRA	CRET-DAKOTA	CRET-CHACRA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2827	7249	3700
WELLHEAD PRESSURE,PSIG	1120	NOT GIVEN	748
OPEN FLOW, MCFD	NOT GIVEN	1817	4545
COMPONENT, MOLE PCT			
METHANE	85.4	87.9	88.9
ETHANE	5.3	6.1	6.2
PROPANE	2.8	2.4	2.3
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.5	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	5.7	0.2	0.0
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.9	1.0
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1117	1153	1132
SPECIFIC GRAVITY	0.660	0.659	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 79 SAMPLE 15874	INDEX 80 SAMPLE 15896	INDEX 81 SAMPLE 15897
STATE	NEW MEXICO	NEW YORK	NEW YORK
COUNTY	SAN JUAN	ALLEGANY	ALLEGANY
FIELD	PICTURED CLIFFS	NOT GIVEN	NOT GIVEN
WELL NAME	NORTHEAST BLANCO NO. 204	BENTLEY 20614-C	BENTLEY 20614-T
LOCATION	SEC. 1 , T31N, R7W	TOWN OF GRANGER	TOWN OF GRANGER
OWNER	BLACKWOOD & NICHOLS CO.	COLUMBIA GAS TRANSMISSION	COLUMBIA GAS TRANSMISSION
COMPLETED	08/21/79	01/24/79	01/24/79
SAMPLED	01/04/80	01/28/80	01/28/80
FORMATION	CRET-FRUITLAND	DEVO-	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	580	160	160
DEPTH, FEET	3404	NOT GIVEN	3050
WELLHEAD PRESSURE,PSIG	1420	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5914	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	79.1	74.7
ETHANE	6.7	13.3	15.8
PROPANE	2.8	4.4	7.0
N-BUTANE	0.5	1.3	1.3
ISOBUTANE	0.4	0.6	0.7
N-PENTANE	0.1	0.4	0.3
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.4	0.4	0.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.1	0.0
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1124	1249	1307
SPECIFIC GRAVITY	0.652	0.710	0.741

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 82 SAMPLE 15906	INDEX 83 SAMPLE 15945	INDEX 84 SAMPLE 15939
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	ERIE
FIELD	BRADFORD	BRADFORD	NOT GIVEN
WELL NAME	B. S. NO. 3	QUINLAN F NO. 2	NATURAL SEEP
LOCATION	TOWN OF OLEAN	TOWN OF OLEAN	TOWN OF EDEN
OWNER	BARKUM 100 DEVELOPMENT	PENNZOIL CO.	BUREAU OF MINERAL RESOURCES
COMPLETED	NOT GIVEN	01/20/80	NOT GIVEN
SAMPLED	02/25/80	04/24/80	04/08/80
FORMATION	DEVO-BRADFORD	DEVO-	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	40	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.2	79.8	71.3
ETHANE	17.1	12.7	15.1
PROPANE	7.3	4.3	7.8
N-BUTANE	1.7	1.0	1.6
ISOBUTANE	0.9	0.5	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	1.2	2.2
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.7
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1341	1220	1296
SPECIFIC GRAVITY	0.766	0.698	0.769

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 85 SAMPLE 15895	INDEX 86 SAMPLE 15900	INDEX 87 SAMPLE 15936
STATE	NEW YORK	NEW YORK	NORTH DAKOTA
COUNTY	GENESEE	SCHUYLER	BILLINGS
FIELD	INDIAN FALLS	NOT GIVEN	BIG STICK W
WELL NAME	KLOTZBACH	PRATT NO. 20611-T	FEDERAL NO.8-24
LOCATION	TOWN OF ALABAMA	TOWN OF READING	SEC. 24,T142N, R101W
OWNER	JUD NOBLE & ASSOCIATES	COLUMBIA GAS TRANSMISSION	KOCH EXPLORATION CO.
COMPLETED	10/25/74	05/23/79	01/13/80
SAMPLED	01/30/80	02/08/80	04/09/80
FORMATION	SILU-MEDINA	DEVO-ORISKANY	MISS-FRYBURG
GEOLOGIC PROVINCE CODE	160	160	395
DEPTH, FEET	940	2300	9600
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2200
COMPONENT, MOLE PCT			
METHANE	85.3	97.1	45.6
ETHANE	8.4	1.9	20.8
PROPANE	2.0	0.1	14.1
N-BUTANE	0.4	0.0	5.5
ISOBUTANE	0.3	0.0	2.4
N-PENTANE	0.1	0.0	1.1
ISOPENTANE	TRACE	0.0	2.1
CYCLOPENTANE	TRACE	0.0	0.2
HEXANES PLUS	0.1	0.0	0.6
NITROGEN	3.1	0.8	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	2.8
CARBON DIOXIDE	TRACE	TRACE	4.0
HELIUM	0.28	0.04	0.01
HEATING VALUE*	1099	1020	1660
SPECIFIC GRAVITY	0.643	0.568	1.058

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 88 SAMPLE 16062	INDEX 89 SAMPLE 15971	INDEX 90 SAMPLE 16143
STATE	NORTH DAKOTA	OKLAHOMA	OKLAHOMA
COUNTY	MCKENZIE	BECKHAM	BECKHAM
FIELD	CHARLSON	CARPENTER SW	CARPENTER W
WELL NAME	SILURIAN UNIT 5NO.1	FARRAR NO. 1-22	THURMOND NO. 1
LOCATION	SEC. 34,T154N, R95W	SEC. 22, T12N, R21W	SEC. 27, T12N, R27W
OWNER	TEXACO INC.	GHK CO.	GHK CO.
COMPLETED	NOT GIVEN	09/20/70	08/21/80
SAMPLED	09/02/80	05/31/80	12/07/80
FORMATION	SILU-INTERLAKE	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	395	360	360
DEPTH, FEET	11408	17002	14806
WELLHEAD PRESSURE,PSIG	2500	12500	8660
OPEN FLOW, MCFD	2000	4439	12277
COMPONENT, MOLE PCT			
METHANE	75.4	97.3	95.2
ETHANE	8.3	0.6	2.1
PROPANE	4.3	0.1	0.4
N-BUTANE	1.7	0.0	0.1
ISOBUTANE	1.2	0.0	0.1
N-PENTANE	0.6	0.0	0.1
ISOPENTANE	0.5	0.0	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.4	0.0	0.2
NITROGEN	3.0	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	3.8	0.0	0.0
CARBON DIOXIDE	0.6	1.6	1.3
HELIUM	0.05	0.02	0.02
HEATING VALUE*	1217	999	1034
SPECIFIC GRAVITY	0.757	0.575	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 91 SAMPLE 15899	INDEX 92 SAMPLE 15979	INDEX 93 SAMPLE 15970
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	MAYFIELD NE	MAYFIELD W	NEW LIBERTY SW
WELL NAME	JOHN S BROWN NO. 1	MILLS NO. 2-19	D.L. SANDERS UNIT NO. 1
LOCATION	SEC. 4, T10N, R25W	SEC. 19, T10N, R26W	SEC. 24, T10N, R25W
OWNER	UNION OIL CO. OF CALIFORNIA	NATOMAS NORTH AMERICA, INC.	MISSISSIPPI RIVER TRANS. EXP
COMPLETED	12/17/77	02/25/80	02/20/79
SAMPLED	02/08/80	06/12/80	05/30/80
FORMATION	PENN-ATOKA	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14075	17796	23920
WELLHEAD PRESSURE, PSIG	4624	4423	3122
OPEN FLOW, MCFD	NOT GIVEN	5850	7779
COMPONENT, MOLE PCT			
METHANE	90.7	96.4	97.5
ETHANE	4.4	1.0	0.1
PROPANE	1.5	0.1	TRACE
N-BUTANE	0.3	0.1	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.4	0.9	2.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.2	TRACE
HELIUM	0.03	0.02	0.05
HEATING VALUE*	1067	1010	989
SPECIFIC GRAVITY	0.618	0.581	0.564

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 94 SAMPLE 16088	INDEX 95 SAMPLE 15933	INDEX 96 SAMPLE 15975
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CANADIAN
FIELD	BINGER W	EAKLY	CANYON CITY SW
WELL NAME	WILLIAMS NO. 1	ALMA BARBEE NO. 1	MILLARD NO. 1
LOCATION	SEC. 33, T10N, R11W	SEC. 31, T10N, R12W	SEC. 30, T11N, R10W
OWNER	SANGUINE, LTD.	HELMRICH & PAYNE, INC.	COTTON PETROLEUM CO.
COMPLETED	08/--/80	04/25/79	NOT GIVEN
SAMPLED	10/09/80	03/26/80	06/--/80
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13100	12456	NOT GIVEN
WELLHEAD PRESSURE,PSIG	8100	7625	NOT GIVEN
OPEN FLOW, MCFD	3500	17553	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.4	85.9	94.3
ETHANE	10.7	7.5	2.7
PROPANE	4.1	3.4	0.7
N-BUTANE	0.9	0.8	0.1
ISOBUTANE	0.8	0.6	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.5	0.4	0.6
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.6	1.0
HELIUM	0.03	0.02	TRACE
HEATING VALUE*	1215	1175	1051
SPECIFIC GRAVITY	0.704	0.671	0.602

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 97 SAMPLE 15982	INDEX 98 SAMPLE 15960	INDEX 99 SAMPLE 15962
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	OKARCHE	YUKON	YUKON
WELL NAME	BOMHOFF "C" NO. 1	WHEATLEY NO. 1-15	WHEATLEY NO. 1-15
LOCATION	SEC. 23, T14N, R8W	SEC. 15, T12N, R5W	SEC. 15, T12N, R5W
OWNER	PHILLIPS PETROLEUM CO.	RALPH E. PLOTNER O&G	RALPH E. PLOTNER OIL & GAS
COMPLETED	NOT GIVEN	NOT GIVEN	11/27/79
SAMPLED	06/07/80	05/13/80	05/13/80
FORMATION	NOT GIVEN	PENN-OSWEGO	DEVO-HUNTON&MISS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7426	7814
WELLHEAD PRESSURE,PSIG	2000	2188	1060
OPEN FLOW, MCFD	NOT GIVEN	17155	850
COMPONENT, MOLE PCT			
METHANE	77.2	80.8	66.2
ETHANE	12.7	10.2	16.2
PROPANE	5.6	4.6	10.8
N-BUTANE	1.7	1.2	3.2
ISOBUTANE	0.6	0.5	1.2
N-PENTANE	0.4	0.3	0.6
ISOPENTANE	0.3	0.2	0.6
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.0	1.6	0.6
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.03	0.05	0.02
HEATING VALUE*	1276	1204	1455
SPECIFIC GRAVITY	0.736	0.700	0.847

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 100 SAMPLE 16089	INDEX 101 SAMPLE 15908	INDEX 102 SAMPLE 16104
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CARPENTER E	THOMAS S	WEATHERFORD
WELL NAME	HUTSON NO. 1-15	C. B. MCNEILL NO. 4	BERGNER NO. 1
LOCATION	SEC. 15, T12N, R20W	SEC. 13, T14N, R14W	SEC. 21, T13N, R14W
OWNER	GHK CO.	SOUTHPORT EXPLORATION, INC.	KAISER-FRANCIS OIL CO.
COMPLETED	02/11/80	NOT GIVEN	08/26/80
SAMPLED	10/15/80	02/28/80	10/20/80
FORMATION	PENN-ATOKA	PENN-RED FORK	-BRITT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14803	10630	13504
WELLHEAD PRESSURE,PSIG	9170	NOT GIVEN	5900
OPEN FLOW, MCFD	7600	449	25396
COMPONENT, MOLE PCT			
METHANE	95.9	78.3	96.3
ETHANE	2.1	9.1	1.8
PROPANE	0.4	4.6	0.3
N-BUTANE	0.1	1.0	TRACE
ISOBUTANE	TRACE	0.6	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	0.4	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.5	4.3	0.3
OXYGEN	0.0	1.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.5	1.1
HELIUM	0.02	0.04	0.03
HEATING VALUE*	1028	1156	1019
SPECIFIC GRAVITY	0.584	0.710	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 103 SAMPLE 15904	INDEX 104 SAMPLE 15944	INDEX 105 SAMPLE 16016
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	GARFIELD
FIELD	HARMON SE	WILDCAT	GARBER NE
WELL NAME	MORAN NO. 1	D. B. SHREWDER NO. 1	RANCH NO. 2
LOCATION	SEC. 25, T19N, R22W	SEC. 36, T18N, R23W	SEC. 5, T23N, R3W
OWNER	MONSANTO CO.	TEXAS PACIFIC OIL CO., INC.	KETAL OIL PRODUCING CO.
COMPLETED	02/22/79	12/01/78	NOT GIVEN
SAMPLED	02/21/80	04/24/80	07/21/80
FORMATION	PENN-MORROW	PENN-ATOKA	PERM-HERRINGTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11036	11070	980
WELLHEAD PRESSURE,PSIG	3000	5464	200
OPEN FLOW, MCFD	9354	3409	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	82.7	78.4
ETHANE	5.8	7.6	7.4
PROPANE	2.2	4.1	3.3
N-BUTANE	0.5	1.3	1.0
ISOBUTANE	0.5	0.9	0.5
N-PENTANE	0.1	2.3	0.3
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.6	0.2
NITROGEN	0.6	0.0	8.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.4	0.2
HELIUM	0.04	0.03	0.18
HEATING VALUE*	1115	1287	1103
SPECIFIC GRAVITY	0.644	0.731	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 106 SAMPLE 16023	INDEX 107 SAMPLE 15903	INDEX 108 SAMPLE 15912
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	HYDRO N W	MINCO W	NAPLES SE
WELL NAME	SOUCHER NO. 1	EISENHOUR NO. 14	BARNETT NO. 1
LOCATION	SEC. 23, T13N, R14W	SEC. 12, T9N, R8W	SEC. 14, T6N, R5W
OWNER	TRIGG DRILLING CO.	LADD PETROLEUM CORP.	ARKLA EXPLORATION CO.
COMPLETED	NOT GIVEN	07/02/79	11/17/79
SAMPLED	07/31/80	02/15/80	03/04/80
FORMATION	PENN-MORROW	PENN-TONKAWA	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13177	7894	13192
WELLHEAD PRESSURE,PSIG	5640	2350	3900
OPEN FLOW, MCFD	1500	2500	2600
COMPONENT, MOLE PCT			
METHANE	95.3	89.4	85.1
ETHANE	2.3	3.2	7.3
PROPANE	0.5	1.6	3.2
N-BUTANE	0.1	0.4	0.9
ISOBUTANE	TRACE	0.2	0.4
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.2	4.5	1.6
OXYGEN	0.0	TRACE	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.1	0.4
HELIUM	0.04	0.13	0.03
HEATING VALUE*	1028	1042	1155
SPECIFIC GRAVITY	0.581	0.622	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 109 SAMPLE 15927	INDEX 110 SAMPLE 16051	INDEX 111 SAMPLE 16146
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	LATIMER	LEFLORE
FIELD	EDMOND W	PANOLA	CEDARS E
WELL NAME	H. MAKVINDA NO. 2	FOSTER NO. 1-35	FRAZIER UNIT NO. 1
LOCATION	SEC. 13, T15N, R5W	SEC. 35, T6N, R20E	SEC. 16, T9N, R26E
OWNER	UNION TEXAS PETROLEUM	MUSTANG PRODUCTION CO.	SAMSON RESOURCES CO.
COMPLETED	01/28/80	06/28/80	09/30/80
SAMPLED	03/27/80	08/22/80	12/11/80
FORMATION	PENN-SKINNER	PENN-SPIRO	PENN-SPIRO
GEOLOGIC PROVINCE CODE	360	345	345
DEPTH, FEET	6460	12630	7372
WELLHEAD PRESSURE,PSIG	1649	4200	NOT GIVEN
OPEN FLOW, MCFD	7288	4000	2200
COMPONENT, MOLE PCT			
METHANE	84.3	93.8	94.4
ETHANE	6.2	0.4	0.8
PROPANE	3.8	0.1	0.1
N-BUTANE	1.1	TRACE	0.0
ISOBUTANE	0.5	TRACE	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	2.8	0.3	0.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	5.2	4.1
HELIUM	0.06	0.04	0.10
HEATING VALUE*	1166	965	973
SPECIFIC GRAVITY	0.682	0.611	0.602

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 112 SAMPLE 16059	INDEX 113 SAMPLE 15879	INDEX 114 SAMPLE 15937
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	PITTSBURG	PITTSBURG
FIELD	POWELL S	BREWER S	BREWER S
WELL NAME	FEDERAL NO. 1	TURNEY NO. 31-2	TURNEY A NO.1
LOCATION	SEC. 11, T8S, R4E	SEC. 21, T4N, R14E	SEC. 32, T4N, R14E
OWNER	AMERICAN QUASAR PET. CO.	SUPRON ENERGY CORP.	TEXAS OIL & GAS CORP.
COMPLETED	12/99/79	NOT GIVEN	09/14/79
SAMPLED	09/03/80	01/11/80	05/02/80
FORMATION	ORDO-OIL CREEK	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	350	345	345
DEPTH, FEET	16162	7360	6496
WELLHEAD PRESSURE,PSIG	9800	2500	1800
OPEN FLOW, MCFD	4400	2000	2000
COMPONENT, MOLE PCT			
METHANE	94.6	95.6	96.4
ETHANE	2.5	1.4	1.5
PROPANE	0.7	0.2	0.3
N-BUTANE	0.3	TRACE	TRACE
ISOBUTANE	0.2	0.0	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	TRACE
NITROGEN	0.9	1.1	0.5
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.4	1.2
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1061	999	1011
SPECIFIC GRAVITY	0.599	0.582	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 115 SAMPLE 15886	INDEX 116 SAMPLE 16134	INDEX 117 SAMPLE 15885
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	KIOWA SW	KIOWA W	WILDCAT
WELL NAME	CHITTY SCOTT NO. 1	HALL "D" 1	CHITTY SCOTT NO. 1
LOCATION	SEC. 30, T3N, R14E	SEC. 19, T3N, R13E	SEC. 30, T3N, R14E
OWNER	HAMILTON BROTHERS OIL CO.	CITIES SERVICE CO.	HAMILTON BROTHERS OIL CO.
COMPLETED	NOT GIVEN	05/06/80	NOT GIVEN
SAMPLED	01/15/80	11/19/80	01/15/80
FORMATION	PENN-CROMWELL	PENN-ATOKA	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	10279	7052	9381
WELLHEAD PRESSURE,PSIG	675	2015	1300
OPEN FLOW, MCFD	2200	NOT GIVEN	470000
COMPONENT, MOLE PCT			
METHANE	96.1	89.1	95.9
ETHANE	0.8	6.4	1.1
PROPANE	0.1	2.0	0.1
N-BUTANE	0.0	0.4	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	0.9	2.3
HELIUM	0.03	0.04	0.04
HEATING VALUE*	990	1110	994
SPECIFIC GRAVITY	0.584	0.636	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 118 SAMPLE 15972	INDEX 119 SAMPLE 16124	INDEX 120 SAMPLE 16127
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	CHEYENNE S	CHEYENNE W	LEEDY SW
WELL NAME	BRADY-1-20	STATE NO. 1-28	TAYLOR FARMS NO. 2
LOCATION	SEC. 20, T12N, R24W	SEC. 28, 113N, R24W	SEC. 25, T16N, R22W
OWNER	AMAREX,INC	LADD PETROLEUM CORP.	SUNMARK EXPLORATION
COMPLETED	01/01/80	09/24/80	04/02/80
SAMPLED	06/04/80	10/28/80	11/06/80
FORMATION	PENN-MORROW	PENN-MORROW	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17280	15660	11140
WELLHEAD PRESSURE,PSIG	11870	4900	4800
OPEN FLOW, MCFD	12690	5200	9825
COMPONENT, MOLE PCT			
METHANE	97.5	97.3	84.7
ETHANE	0.5	0.5	8.1
PROPANE	TRACE	0.1	3.6
N-BUTANE	0.0	0.0	0.8
ISOBUTANE	0.0	0.0	0.6
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	0.3	0.2	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.8	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	997	997	1188
SPECIFIC GRAVITY	0.575	0.576	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 121 SAMPLE 16093	INDEX 122 SAMPLE 15876	INDEX 123 SAMPLE 15959
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHINGTON	WOODS	WOODS
FIELD	HOGSHOOTER	EDITH S	NOT GIVEN
WELL NAME	REYNOLDS NO. 1	DEVINE NO. 1	PARKER NO. 1-24
LOCATION	SEC. 20, T25N, R14E	SEC. 34, T27N, R18W	SEC. 24, T29N, R19W
OWNER	ECC OIL CO.	TEXAS OIL & GAS	BOSWELL ENERGY CORP.
COMPLETED	08/17/78	NOT GIVEN	03/14/80
SAMPLED	10/08/80	01/15/80	05/08/80
FORMATION	PENN-SKINNER	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	355	360	360
DEPTH, FEET	780	NOT GIVEN	5709
WELLHEAD PRESSURE,PSIG	325	NOT GIVEN	1820
OPEN FLOW, MCFD	2000	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	86.3	93.7	91.5
ETHANE	2.3	3.2	3.6
PROPANE	2.6	1.1	1.3
N-BUTANE	0.9	0.3	0.4
ISOBUTANE	0.6	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	6.0	0.8	2.1
OXYGEN	0.2	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.07	0.05	0.10
HEATING VALUE*	1070	1066	1068
SPECIFIC GRAVITY	0.659	0.599	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 124 SAMPLE 16149	INDEX 125 SAMPLE 15991	INDEX 126 SAMPLE 15992
STATE	OKLAHOMA	OKLAHOMA	PENNSYLVANIA
COUNTY	WOODWARD	WOODWARD	GREENE
FIELD	RICHMOND NW	WOODWARD N	FORDYCE
WELL NAME	WYMAN "A" NO. 1-33	PHILLIPS DUNCAN NO. 1	HEADLEY NO. 5453
LOCATION	SEC. 33, T21N, R18W	SEC. 29, T23N, R21W	SEC. F, GARADS FORT QUAD.
OWNER	ANADARKO PRODUCTION CO.	HILLIARD OIL & GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	08/21/80	12/12/75	02/05/80
SAMPLED	12/11/80	06/18/80	06/25/80
FORMATION	PENN-MORROW & MISS-CHESTER	DEVO-HUNTON	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	360	360	475
DEPTH, FEET	8242	10336	1590
WELLHEAD PRESSURE,PSIG	2905	3055	NOT GIVEN
OPEN FLOW, MCFD	29643	2067	7500
COMPONENT, MOLE PCT			
METHANE	88.5	92.8	88.5
ETHANE	2.7	2.7	6.3
PROPANE	1.6	0.8	2.2
N-BUTANE	0.7	0.3	0.5
ISOBUTANE	0.9	0.2	0.4
N-PENTANE	0.8	0.1	0.2
ISOPENTANE	1.2	0.1	0.1
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	1.3	0.2	0.2
NITROGEN	1.3	2.3	1.4
OXYGEN	0.2	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.0
HELIUM	0.07	0.08	0.11
HEATING VALUE*	1203	1045	1120
SPECIFIC GRAVITY	0.694	0.607	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 127 SAMPLE 16063	INDEX 128 SAMPLE 16056	INDEX 129 SAMPLE 16101
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANGELINA	BEE	BRAZORIA
FIELD	WILDCAT	YOWARD	PEACH POINT
WELL NAME	TUCKER NO. 1	YOWARD NO. 2	AUSTIN COLLEGE NO. 2
LOCATION	SARAH ODELL SUR. A-494	3 MI. S.W. MINERAL	STEVEN F. AUSTIN SUR. A-27
OWNER	HNG OIL CO.	TEXAS OIL & GAS CORP.	MONSANTO CO.
COMPLETED	NOT GIVEN	06/05/80	08/--/78
SAMPLED	09/08/80	08/20/80	10/15/80
FORMATION	CRET-JAMES	EOCE-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	260	220	220
DEPTH, FEET	9836	8236	11216
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1950	5255
OPEN FLOW, MCFD	2858	1050	5730
COMPONENT, MOLE PCT			
METHANE	93.9	87.6	93.8
ETHANE	1.8	5.9	3.4
PROPANE	0.9	2.5	0.9
N-BUTANE	0.4	0.7	0.2
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.3	TRACE	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	2.0	0.9
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1062	1134	1070
SPECIFIC GRAVITY	0.616	0.663	0.607

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 130 SAMPLE 15907	INDEX 131 SAMPLE 15986	INDEX 132 SAMPLE 16099
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	RUCIAS N	RUCIAS N	RUCIAS N
WELL NAME	CARTER RANCH NO. 1	BARBARA LIPS "C" NO. 1	BARBARA LIPS "C" NO. 1
LOCATION	LA RUCIO GT., A-481	9 MI. SW RACHAL	VARGAS GRANT, A-192
OWNER	MCCORMICK O&G CORP.	HILLIARD OIL & GAS, INC.	HILLIARD OIL & GAS, INC.
COMPLETED	02/21/80	10/16/79	10/16/79
SAMPLED	02/17/80	06/18/80	10/14/80
FORMATION	TERT-VICKSBURG	OLIG-VICKSBURG	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10314	10470	10470
WELLHEAD PRESSURE,PSIG	7646	8360	8500
OPEN FLOW, MCFD	18000	43000	3000
COMPONENT, MOLE PCT			
METHANE	85.4	71.8	67.8
ETHANE	7.8	9.0	10.2
PROPANE	3.4	6.7	7.9
N-BUTANE	0.7	3.2	3.6
ISOBUTANE	0.9	3.2	3.7
N-PENTANE	0.2	1.3	1.5
ISOPENTANE	0.3	1.9	2.0
CYCLOPENTANE	TRACE	0.2	0.3
HEXANES PLUS	0.2	1.5	1.9
NITROGEN	0.3	0.1	0.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.2	1.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1179	1499	1579
SPECIFIC GRAVITY	0.675	0.878	0.928

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 133 SAMPLE 16085	INDEX 134 SAMPLE 15946	INDEX 135 SAMPLE 15954
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CASS	FORT BEND	FORT BEND
FIELD	KILDARE	PECAN GROVE	PECAN GROVE
WELL NAME	G. H. JOHNSON NO. 1	PECAN GROVE GAS UNIT NO. 1	PECAN GROVE GAS UNIT NO. 1
LOCATION	JOHN M. WATSON SUR. A-1075	RANDALL JONES SUR. A-42	RANDALL JONES SUR., A-42
OWNER	HILLIARD OIL & GAS, INC.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	NOT GIVEN	09/05/79	09/05/79
SAMPLED	10/01/80	04/22/80	04/22/80
FORMATION	JURA-SMACKOVER	EOCE-COOK MOUNTAIN	EOCE-COOK MOUNTAIN
GEOLOGIC PROVINCE CODE	260	220	220
DEPTH, FEET	10661	8686	8686
WELLHEAD PRESSURE, PSIG	5200	5442	5442
OPEN FLOW, MCFD	2892	4998	4998
COMPONENT, MOLE PCT			
METHANE	64.8	90.5	85.6
ETHANE	4.1	5.2	4.9
PROPANE	1.9	1.8	1.8
N-BUTANE	0.8	0.4	0.5
ISOBUTANE	1.0	0.4	0.4
N-PENTANE	0.6	0.1	0.1
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.9	0.3	0.3
NITROGEN	24.7	0.5	4.5
OXYGEN	0.1	TRACE	1.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	0.3
HELIUM	0.05	TRACE	0.01
HEATING VALUE*	915	1120	1072
SPECIFIC GRAVITY	0.767	0.633	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 136 SAMPLE 16126	INDEX 137 SAMPLE 15973	INDEX 138 SAMPLE 15994
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FORT BEND	FREESTONE	FREESTONE
FIELD	PECAN GROVE	NEAL SMACKOVER	NEAL SMACKOVER
WELL NAME	PECAN GROVE GAS UNIT NO. 1	GLAYDENE NEAL NO. 1	GLAYDENE NEAL NO. 1
LOCATION	RANDALL JONES SUR. A-42	JOHN BRADLEY SUR., A-53	JOHN BRADLEY SUR., A-53
OWNER	EXXON CO., U.S.A.	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	11/08/79	03/14/79	03/14/79
SAMPLED	10/29/80	06/02/80	07/02/80
FORMATION	EOCE-COOK MOUNTAIN	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	220	260	260
DEPTH, FEET	8567	11599	11599
WELLHEAD PRESSURE,PSIG	5457	3826	3826
OPEN FLOW, MCFD	4998	13600	13600
COMPONENT, MOLE PCT			
METHANE	88.3	49.7	38.4
ETHANE	5.6	8.0	7.0
PROPANE	2.3	3.2	2.7
N-BUTANE	1.0	1.2	1.0
ISOBUTANE	0.7	1.2	0.9
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.7	0.5	0.4
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	0.3	1.7	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	28.9	44.4
CARBON DIOXIDE	0.3	5.0	4.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1183	1040	964
SPECIFIC GRAVITY	0.668	0.922	0.984

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 139 SAMPLE 16077	INDEX 140 SAMPLE 16060	INDEX 141 SAMPLE 16086
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAYSON	HARDIN
FIELD	WILDCAT	MINERAL CREEK W	BRADLEY S
WELL NAME	GM. D. STOCKSTILL NO. 1	PETRO LEWIS-KUSCH GU NO. 1	AR&S BRADLEY FEE NO. 1
LOCATION	SEC. 185, BLK. M2, BS&F SUR.	1/2MI.W OF POTTSBORO	1.05 MI. NE OF SETH
OWNER	HUNT ENERGY CORP.	AMERICAN QUASAR PET. CO.	JAKE L. HAMON
COMPLETED	05/06/80	03/24/80	11/12/79
SAMPLED	09/04/80	09/04/80	09/29/80
FORMATION	-STRAY SAND	PENN-DORNICK HILLS	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	440	350	220
DEPTH, FEET	9740	12198	7773
WELLHEAD PRESSURE,PSIG	3473	5813	2700
OPEN FLOW, MCFD	4650	28500	2754
COMPONENT, MOLE PCT			
METHANE	91.2	84.1	84.5
ETHANE	3.5	9.2	4.3
PROPANE	1.5	3.4	2.3
N-BUTANE	0.5	0.9	0.6
ISOBUTANE	0.1	0.3	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	2.3	0.8	6.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.3
HELIUM	0.05	0.02	0.02
HEATING VALUE*	1077	1168	1082
SPECIFIC GRAVITY	0.622	0.672	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 142 SAMPLE 16144	INDEX 143 SAMPLE 15941	INDEX 144 SAMPLE 15942
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	ALLISON PARK	ALPAR	ALPAR
WELL NAME	L. L. JONES 14 LEASE NO. 1	FEE 1-111	FEE 1-111
LOCATION	SEC. 14, BLK.Z1, ACH&B&H&W	SEC. 111, BLK.41,H&TC SUR.	SEC. 111,BLK.41,H&TC SUR.
OWNER	KERR-MCGEE CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	03/31/80	04/01/79	04/01/79
SAMPLED	12/10/80	04/23/80	04/23/80
FORMATION	PENN-MORROW	PENN-DOUGLAS	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14918	7300	8000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	9500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.9	83.1	81.4
ETHANE	0.6	7.9	7.5
PROPANE	0.1	4.2	5.0
N-BUTANE	TRACE	1.1	1.5
ISOBUTANE	TRACE	0.6	0.7
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.0	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.3	2.1	2.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.3	0.4
HELIUM	0.02	0.14	0.09
HEATING VALUE*	1000	1180	1207
SPECIFIC GRAVITY	0.582	0.687	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 145 SAMPLE 15926	INDEX 146 SAMPLE 16018	INDEX 147 SAMPLE 16090
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HIDALGO
FIELD	BRISCOE	CAMPBELL RANCH	MCALLEN RANCH
WELL NAME	S. G. SMITH NO. 1	CAMPBELL NO. 1-14	A. W. BEAULINE NO. 3
LOCATION	SEC. 38, BLK. M1, H&GN SUR.	SEC. 14, BLK I, I&GN SUR.	SANTA ANITA GRANT A-63
OWNER	UNION OIL CO. OF CALIFORNIA	HOOVER & BRACKEN ENERGIES	SUN GAS CO.
COMPLETED	08/24/79	NOT GIVEN	NOT GIVEN
SAMPLED	03/25/80	07/25/80	10/13/80
FORMATION	PENN-MORROW	PERM-GRANITE WASH	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	360	360	220
DEPTH, FEET	14438	9734	13125
WELLHEAD PRESSURE,PSIG	6303	2425	NOT GIVEN
OPEN FLOW, MCFD	16500	1042	7000
COMPONENT, MOLF PCT			
METHANE	95.6	88.8	92.0
ETHANE	1.4	6.3	5.0
PROPANE	0.2	2.2	1.2
N-BUTANE	0.1	0.5	0.3
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.5	0.4	0.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.7	0.1
HELIUM	0.02	0.03	TRACE
HEATING VALUE*	1015	1127	1100
SPECIFIC GRAVITY	0.590	0.642	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 148 SAMPLE 15985	INDEX 149 SAMPLE 15998	INDEX 150 SAMPLE 16025
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HUTCHINSON	JACKSON
FIELD	WILDCAT	LIPS W	APPLING
WELL NAME	BARBARA LIPS NO. 1	PATTERSON GAS UNIT NO. 2	FLOYD APPLING NO. 1
LOCATION	15 MI. S. RACHAL	SEC. 73, BLK. RGB&CNG SUR.	JOHN R. WICKHAM SUR. A-274
OWNER	HILLIARD OIL & GAS, INC.	SUN OIL CO.	DAVIS OIL CO.
COMPLETED	05/16/78	12/21/79	06/--/78
SAMPLED	06/18/80	07/05/80	08/01/80
FORMATION	OLIG-VICKSBURG	PENN-CLEVELAND	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	440	220
DEPTH, FEET	15163	6560	9332
WELLHEAD PRESSURE,PSIG	12400	1532	1800
OPEN FLOW, MCFD	10500	8500	2060
COMPONENT, MOLE PCT			
METHANE	89.8	82.7	82.4
ETHANE	2.9	7.9	4.4
PROPANE	1.4	4.3	1.9
N-BUTANE	0.7	1.3	0.5
ISOBUTANE	1.2	0.4	1.0
N-PENTANE	0.6	0.3	0.2
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	1.4	0.1	0.3
NITROGEN	0.1	2.4	6.5
OXYGEN	TRACE	0.0	1.6
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.2	0.8
HELIUM	TRACE	0.13	0.01
HEATING VALUE*	1184	1183	1054
SPECIFIC GRAVITY	0.680	0.690	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 151 SAMPLE 15932	INDEX 152 SAMPLE 15916	INDEX 153 SAMPLE 16137
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	CAMBRIDGE	KIOWA CREEK N
WELL NAME	FRED LOESCH NO. 2	MERYDITH NO. 1	PARKER "F" NO. 1
LOCATION	SEC. 945, BLK. 43, H&TC SUR.	SEC. 499, BL43,H&TC SUR.	SEC. 1031, BLK. 43, H&TC SUR
OWNER	ARCO OIL & GAS CO.	MAY PETROLEUM, INC.	TEXAS OIL & GAS CORP.
COMPLETED	11/26/79	NOT GIVEN	08/20/80
SAMPLED	04/09/80	03/09/80	12/04/80
FORMATION	PENN-CLEVELAND	PENN-ATOKA&NOVA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7334	8700	8654
WELLHEAD PRESSURE,PSIG	1885	NOT GIVEN	2900
OPEN FLOW, MCFD	11500	9500	38000
COMPONENT, MOLE PCT			
METHANE	86.1	86.5	84.4
ETHANE	5.8	9.0	7.4
PROPANE	3.8	2.6	3.5
N-BUTANE	1.2	0.6	0.8
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.3	0.1	1.8
OXYGEN	TRACE	0.0	0.4
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.12	0.07	0.07
HEATING VALUE*	1173	1150	1147
SPECIFIC GRAVITY	0.674	0.649	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 154 SAMPLE 16142	INDEX 155 SAMPLE 16148	INDEX 156 SAMPLE 16032
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIVE OAK
FIELD	LIPSCOMB SW	MAY	LIMES
WELL NAME	OWEN NO. 1-544	TERRELL NO. 1	C. S. NELSON TRUST NO. 1
LOCATION	SEC. 544, BLK. 43, H&TC SUR.	SEC.1125, BLK.43, H&TC SUR.	CAMERON CO. SCHOOL LAND
OWNER	NATURAL GAS ANADARKO, INC.	UNIVERSAL RESOURCES CORP.	PEND OREILLE OIL & GAS CO.
COMPLETED	03/25/80	09/15/80	NOT GIVEN
SAMPLED	12/05/80	12/15/80	07/31/80
FORMATION	PENN-ATOKA	PENN-MORROW	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	360	360	220
DEPTH, FEET	9211	9228	7882
WELLHEAD PRESSURE,PSIG	2791	3223	2249
OPEN FLOW, MCFD	5900	4300	5000
COMPONENT, MOLE PCT			
METHANE	87.7	93.5	86.2
ETHANE	7.9	2.4	6.2
PROPANE	2.1	0.6	3.1
N-BUTANE	0.5	0.1	0.8
ISOBUTANE	0.2	0.1	0.6
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.6	1.5	0.3
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.1	1.7
HELIUM	0.05	0.04	0.01
HEATING VALUE*	1125	1026	1157
SPECIFIC GRAVITY	0.640	0.598	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 157 SAMPLE 16079	INDEX 158 SAMPLE 15887	INDEX 159 SAMPLE 15888
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LOVING	MATAGORDA	MATAGORDA
FIELD	WILDCAT	DUNCAN SLOUGH S	DUNCAN SLOUGH S
WELL NAME	RED BLUFF DEEP NO. 1	GULF COAST WATER NO. 1	GULF COAST WATER NO. 1
LOCATION	SEC. 7, BLK. 56,T-1-T&P SUR.	MONTEZ & DURAN SUR. 11	MONTEZ & DURAN SUR. 11
OWNER	H. L. BROWN, JR.	DANIEL OIL CO.	DANIEL OIL CO.
COMPLETED	03/--/80	NOT GIVEN	NOT GIVEN
SAMPLED	09/25/80	01/29/80	01/29/80
FORMATION	PERM-WICHITA-ALBANY	OLIG-FRIO F-6 UPPER	OLIG-FRIO LOWER
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	11971	10719	11092
WELLHEAD PRESSURE,PSIG	7963	6000	4000
OPEN FLOW, MCFD	10500	58000	8000
COMPONENT, MOLE PCT			
METHANE	86.3	91.7	89.3
ETHANE	8.5	4.5	5.5
PROPANE	2.6	1.5	2.1
N-BUTANE	0.8	0.4	0.5
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.5	0.3	0.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	1.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1165	1093	1126
SPECIFIC GRAVITY	0.659	0.623	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 160 SAMPLE 15882	INDEX 161 SAMPLE 16017	INDEX 162 SAMPLE 15987
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MITCHELL	NUECES
FIELD	TILDEN E	TURNER-GREGORY	CHAPMAN RANCH
WELL NAME	L. H. MCLAUGHERTY NO. 1	ADAMS NO. 2	CHAPMAN J NO. 1
LOCATION	BS&F SUR. 13, A-517	SEC.24,BLK.29T-LN-T&P SUR.	SEC. 82, LAURELES FARM TRACT
OWNER	SHELL OIL CO.	ELLPEN, INC.	MORGAN ENTERPRISES, INC.
COMPLETED	11/12/77	NOT GIVEN	01/10/80
SAMPLED	01/21/80	07/22/80	06/20/80
FORMATION	CRET-EDWARDS	PERM-CLEARFORK	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	430	220
DEPTH, FEET	11692	1350	13668
WELLHEAD PRESSURE,PSIG	4240	750	9025
OPEN FLOW, MCFD	14000	NOT GIVEN	3200
COMPONENT, MOLE PCT			
METHANE	91.4	TRACE	84.8
ETHANE	1.2	0.0	7.1
PROPANE	0.3	TRACE	3.2
N-BUTANE	0.1	0.0	0.8
ISOBUTANE	0.1	0.0	1.1
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	TRACE	0.0	0.3
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.5
NITROGEN	0.2	99.7	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	6.6	0.0	1.6
HELIUM	TRACE	0.10	TRACE
HEATING VALUE*	967	0	1184
SPECIFIC GRAVITY	0.634	0.966	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 163 SAMPLE 15919	INDEX 164 SAMPLE 16094	INDEX 165 SAMPLE 16095
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	COTTON	RED FISH BAY N	RED FISH BAY N
WELL NAME	THOMAS L. BUSENLEHNER NO. 1	STATE TRACT 351 NO. 2	STATE TRACT 342 NO. 2
LOCATION	G. FARIAS GRANT, A-592	S.T.351, CORPUS CHRISTI BAY	3 MI. E OF ENGLESIDE
OWNER	HUGHES & HUGHES	MCMORAN EXPLORATION CO.	MCMORAN EXPLORATION CO.
COMPLETED	08/07/79	02/99/79	11/99/79
SAMPLED	03/13/80	10/13/80	10/13/80
FORMATION	OLIG-VICKSBURG	OLIG-FRIO	OLIG-FRIO D-1
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8518	7858	9550
WELLHEAD PRESSURE,PSIG	3411	450	2800
OPEN FLOW, MCFD	31000	3289	4604
COMPONENT, MOLE PCT			
METHANE	91.4	91.8	91.1
ETHANE	4.9	3.8	3.7
PROPANE	1.8	1.5	1.5
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.1	0.5	1.1
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1118	1107	1093
SPECIFIC GRAVITY	0.628	0.628	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 166 SAMPLE 15952	INDEX 167 SAMPLE 16058	INDEX 168 SAMPLE 15951
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	DUDE WILSON	ELLIS RANCH	HANNA LAKE
WELL NAME	FIRST NATIONAL TRUST NO. 1	ODC "A" NO. 2	RAY NO. 1
LOCATION	SEC. 571, BLK. 43, H&TC SUR.	SEC. 760, BLK. 43, H&TC SUR.	SEC. 43, BLK. 10, H&TB SUR.
OWNER	COURSON OIL & GAS INC.	DIAMOND SHAMROCK CORP.	COURSON OIL & GAS INC.
COMPLETED	07/30/79	07/28/80	06/11/79
SAMPLED	04/28/80	09/04/80	04/18/80
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6955	7098	8068
WELLHEAD PRESSURE,PSIG	1604	1530	1748
OPEN FLOW, MCFD	4000	6100	2570
COMPONENT, MOLE PCT			
METHANE	83.2	88.4	81.1
ETHANE	6.3	6.1	7.2
PROPANE	4.6	2.5	5.7
N-BUTANE	1.4	0.8	1.7
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.4	0.2	0.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.5	0.8	1.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.15	0.07	0.14
HEATING VALUE*	1183	1138	1237
SPECIFIC GRAVITY	0.692	0.648	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 169 SAMPLE 16136	INDEX 170 SAMPLE 15953	INDEX 171 SAMPLE 15875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OLDHAM
FIELD	HARRIS	MARSH	LAMBERT
WELL NAME	HARRIS "G" NO.1	POWERS NO. 1	JAY TAYLOR NO. A-1
LOCATION	SEC. 1175, BLK. 43, H&TC SUR	SEC. 496, BLK. 43, H&TC SUR.	SEC. 82, BLK. GMS, LEE SUR.
OWNER	TEXAS OIL & GAS CORP.	NATURAL GAS ANADARKO, INC.	BAKER & TAYLOR DRILLING CO.
COMPLETED	08/21/80	06/25/79	01/11/79
SAMPLED	12/04/80	04/28/80	11/09/79
FORMATION	PENN-MORROW	PENN-DOUGLAS	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	435
DEPTH, FEET	8319	5802	6776
WELLHEAD PRESSURE,PSIG	2000	1585	120
OPEN FLOW, MCFD	7000	3250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.2	77.6	33.6
ETHANE	9.8	6.1	10.6
PROPANE	5.9	4.8	14.8
N-BUTANE	1.5	1.4	3.9
ISOBUTANE	0.6	0.6	1.7
N-PENTANE	0.3	0.3	1.0
ISOPENTANE	0.3	0.3	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.5	8.1	32.8
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.2
HELIUM	0.10	0.26	0.42
HEATING VALUE*	1241	1127	1181
SPECIFIC GRAVITY	0.726	0.714	1.013

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 172 SAMPLE 16065	INDEX 173 SAMPLE 15881	INDEX 174 SAMPLE 16052
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PECOS
FIELD	LAKE MINERAL WELLS	LAKE WEATHERFORD	NOT GIVEN
WELL NAME	J. C. PEIPELMAN NO. 2-C	YEARY NO. 1	UNIVERSITY 23-15 NO. 1
LOCATION	MEP SUR. NO. 341, A1493	W. FRANKLIN SUR. A-468	SEC. 15, BLK. 23, U L SUR.
OWNER	MITCHELL ENERGY CORP.	DALLAS PRODUCTION, INC.	EXXON CO., USA
COMPLETED	05/11/79	06/--/77	NOT GIVEN
SAMPLED	09/12/80	01/16/80	08/21/80
FORMATION	PENN-ATOKA	PENN-CONGLOMERATE	PENN-MORROW
GEOLOGIC PROVINCE CODE	420	420	430
DEPTH, FEET	4191	5600	17916
WELLHEAD PRESSURE,PSIG	1516	1500	9950
OPEN FLOW, MCFD	4300	2106	2692
COMPONENT, MOLE PCT			
METHANE	77.7	83.3	96.6
ETHANE	11.7	9.6	0.6
PROPANE	4.9	2.8	0.1
N-BUTANE	1.3	0.5	0.0
ISOBUTANE	0.8	0.5	0.0
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.5	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	2.0	2.3	0.4
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	2.3
HELIUM	0.10	0.10	0.01
HEATING VALUE*	1248	1145	992
SPECIFIC GRAVITY	0.729	0.668	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 175 SAMPLE 15984	INDEX 176 SAMPLE 16027	INDEX 177 SAMPLE 16028
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POLK	POTTER	POTTER
FIELD	DAMASCUS	LAMBERT NO. 3	LAMBERT NO. 3
WELL NAME	ANICO NO. 1	EMENY-O'BRIEN NO. 2	EMENY-O'BRIEN NO. 2
LOCATION	I & G SUR., A-337	SEC. 30, BLK. M-19, G&M SUR.	SEC. 30, BLK. M-19, G&M SUR.
OWNER	HINTON PRODUCTION CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED	NOT GIVEN	DRILL STEM TEST	DRILL STEM TEST
SAMPLED	06/--/80	08/09/80	08/--/80
FORMATION	CRET-WOODBINE	PERM-WICHITA ALBANY	PERM-WICHITA ALBANY
GEOLOGIC PROVINCE CODE	220	440	440
DEPTH, FEET	9175	3412	3412
WELLHEAD PRESSURE,PSIG	3467	65	65
OPEN FLOW, MCFD	37000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.2	63.4	63.3
ETHANE	1.8	3.9	3.9
PROPANE	0.6	1.8	1.8
N-BUTANE	0.3	0.5	0.6
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.0	27.6	27.5
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	TRACE	TRACE
HELIUM	0.03	1.83	1.81
HEATING VALUE*	1013	803	810
SPECIFIC GRAVITY	0.616	0.719	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 178 SAMPLE 16029	INDEX 179 SAMPLE 16030	INDEX 180 SAMPLE 15990
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	LAMBERT NO. 3	LAMBERT NO. 3	WILDCAT
WELL NAME	EMENY-O'BRIEN NO. 1	EMENY-O'BRIEN NO. 2	EMENY NO.1
LOCATION	SEC. 30, BLK. M-19, G&M SUR.	SEC. 30, BLK. M-19, G&M SUR.	SEC. 29, BLK M-19, G&M SUR.
OWNER	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DR. CO.
COMPLETED	DRILL STEM TEST	DRILL STEM TEST	NOT GIVEN
SAMPLED	06/--/80	08/09/80	06/28/80
FORMATION	PERM-WICHITA ALBANY	PERM-WICHITA ALBANY	PENN-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3412	3412	5700
WELLHEAD PRESSURE,PSIG	65	65	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.2	63.4	36.9
ETHANE	3.9	3.8	2.9
PROPANE	1.8	1.9	4.4
N-BUTANE	0.6	0.5	5.0
ISOBUTANE	0.3	0.3	2.4
N-PENTANE	0.1	0.1	2.1
ISOPENTANE	0.2	0.2	2.6
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.1	0.1	1.4
NITROGEN	27.6	27.4	40.7
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	0.1	0.3
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.85	1.83	0.65
HEATING VALUE*	809	808	1081
SPECIFIC GRAVITY	0.724	0.720	1.028

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 181 SAMPLE 16000	INDEX 182 SAMPLE 16080	INDEX 183 SAMPLE 16068
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	ROBERTS
FIELD	WILDCAT	WILDCAT	LEDRICK RANCH
WELL NAME	EMENY NO. 1	EMENY NO. 1	LEDRICK NO. 2-55
LOCATION	SEC. 29, BLK. M-19, G&M SUR.	SEC. 29, BLK. M-19, G&M SUR.	SEC. 55, BLK. C, G&M SUR.
OWNER	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	TENNECO OIL CO.
COMPLETED	07/09/80	07/09/80	06/24/80
SAMPLED	07/17/80	09/24/80	09/18/80
FORMATION	PENN-GRANITE WASH	PENN-GRANITE WASH	PENN-MORROW
GEOLOGIC PROVINCE CODE	440	440	360
DEPTH, FEET	5700	5700	9285
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	43.6	37.3	76.9
ETHANE	3.6	2.7	13.6
PROPANE	4.4	3.1	5.4
N-BUTANE	2.6	2.4	1.3
ISOBUTANE	1.3	1.3	0.3
N-PENTANE	0.9	0.6	0.2
ISOPENTANE	1.0	0.8	0.2
CYCLOPENTANE	0.2	0.5	TRACE
HEXANES PLUS	0.6	0.7	0.1
NITROGEN	40.1	49.4	1.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.4	0.4	0.0
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.0	0.5
HELIUM	0.61	0.58	0.02
HEATING VALUE*	871	747	1239
SPECIFIC GRAVITY	0.904	0.912	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 184 SAMPLE 16140	INDEX 185 SAMPLE 16106	INDEX 186 SAMPLE 16091
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	SAN PATRICIO	SHACKELFORD
FIELD	MENDOTA NW	BRANNON	ROCKWELL S
WELL NAME	FLOWERS TRUST "B" NO. 3	J.R.C. BRANNON NO. 1	WALKER BUCKLER 78 NO. 1
LOCATION	SEC. C, BS&F SUR.	P. BRYODY SUR. A-52	SEC. 78, BLK. 12, T&PRR SUR.
OWNER	EXXON CO., U.S.A.	WAINOCO OIL & GAS CO.	JONES CO.
COMPLETED	NOT GIVEN	01/31/79	10/11/79
SAMPLED	12/08/80	10/21/80	10/10/80
FORMATION	PENN-GRANITE WASH	OLIG-FRIO	-CONGLOMERATE
GEOLOGIC PROVINCE CODE	360	220	425
DEPTH, FEET	10102	10521	4578
WELLHEAD PRESSURE,PSIG	1835	6755	1383
OPEN FLOW, MCFD	21500	3537	7500
COMPONENT, MOLE PCT			
METHANE	77.5	88.8	70.6
ETHANE	8.3	6.2	10.5
PROPANE	7.4	2.5	5.5
N-BUTANE	1.9	0.5	1.4
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	3.5	0.2	10.0
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.1
HELIUM	0.12	TRACE	0.27
HEATING VALUE*	1231	1126	1162
SPECIFIC GRAVITY	0.732	0.641	0.757

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 187 SAMPLE 16097	INDEX 188 SAMPLE 16022	INDEX 189 SAMPLE 16071
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STERLING	VAL VERDE
FIELD	NOT GIVEN	STERLING CITY	MASSIE
WELL NAME	I.V.MONTALVO "C" NO.39L	WILLIAMS NO. 2-4	WEST A NO. 1
LOCATION	LOS RETACHEZ GNT. A347	SEC. 4, BLK. T, T&P SUR.	SEC. 13, BLK. O, GH&SA SUR.
OWNER	SUN GAS CO.	MESA PETROLEUM CO.	CITIES SERVICE CO.
COMPLETED	NOT GIVEN	05/13/79	07/10/80
SAMPLED	10/14/80	07/30/80	09/16/80
FORMATION	OLIG-VICKSBURG	SILU-FUSSELMAN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	220	430	430
DEPTH, FEET	7140	8400	11100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2398	4200
OPEN FLOW, MCFD	3222	3400	3975
COMPONENT, MOLE PCT			
METHANE	91.1	66.0	93.4
ETHANE	4.6	15.8	0.3
PROPANE	2.0	7.3	TRACE
N-BUTANE	0.6	1.8	0.0
ISOBUTANE	0.5	0.8	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	0.2	6.3	1.1
OXYGEN	TRACE	0.4	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.7	4.9
HELIUM	TRACE	0.03	0.06
HEATING VALUE*	1135	1268	952
SPECIFIC GRAVITY	0.633	0.799	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 190 SAMPLE 16020	INDEX 191 SAMPLE 15961	INDEX 192 SAMPLE 15950
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WHEELER
FIELD	MERIDIAN S	QUIBAR	CANDICE
WELL NAME	UNIVERSITY 27-19 NO. 1	GULF NO. 1	SHELTON NO. 1
LOCATION	SEC. 27, BLK. 19, ULS SUR.	SEC. 181,BLK. 34, H&TC SUR.	SEC. 77, BLK. A-5, H&GN SUR.
OWNER	GETTY OIL CO.	EXXON CORP.	NATURAL GAS ANADARKO, INC.
COMPLETED	05/15/79	06/19/79	08/29/79
SAMPLED	07/30/80	05/15/80	04/21/80
FORMATION	PERM-WICHITA ALBANY	SILU-FUSSELMAN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	360
DEPTH, FEET	15667	17735	12597
WELLHEAD PRESSURE,PSIG	8650	4915	3712
OPEN FLOW, MCFD	5100	23440	2400
COMPONENT, MOLE PCT			
METHANE	94.7	94.3	82.3
ETHANE	2.9	0.5	9.8
PROPANE	0.6	0.1	4.3
N-BUTANE	0.1	TRACE	1.0
ISOBUTANE	0.1	TRACE	0.5
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.9	0.4	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	4.5	0.5
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1047	972	1203
SPECIFIC GRAVITY	0.593	0.605	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 193 SAMPLE 16133	INDEX 194 SAMPLE 16076	INDEX 195 SAMPLE 16103
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	ZAPATA
FIELD	FARRIS	WILDCAT	EL GRULLO
WELL NAME	FARRIS "C" NO. 2-18	E. T. DAVIS NO. 1	ANTONIO M. VELA NO. C-1
LOCATION	SEC. 18, BLK. A-4, H&GN	SEC. 60, BLK. A7, H&GN SUR.	EL GRULLO GRT. A-37
OWNER	SEARCH DRILLING CO.	HUNT ENERGY CORP.	PENNZOIL CO.
COMPLETED	06/12/80	04/08/80	NOT GIVEN
SAMPLED	11/18/80	09/04/80	10/18/80
FORMATION	DEVO-HUNTON	PENN-MORROW	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	360	360	220
DEPTH, FEET	16306	17425	6762
WELLHEAD PRESSURE,PSIG	4639	6559	3700
OPEN FLOW, MCFD	57000	2393	7900
COMPONENT, MOLE PCT			
METHANE	95.2	97.3	92.8
ETHANE	2.3	0.8	3.4
PROPANE	0.6	0.1	0.8
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.5	0.3
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.0	1.9
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1045	1011	1049
SPECIFIC GRAVITY	0.589	0.576	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 196 SAMPLE 15877	INDEX 197 SAMPLE 16078	INDEX 198 SAMPLE 16061
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	SUMMIT	UINTA
FIELD	BRYSON CANYON	ANSCHUTZ E	BOOK CLIFF
WELL NAME	FEDERAL NO. 3-15	BOUNTIFUL LIVESTOCK NO. 1	MAIN CANYON NO. 14-16
LOCATION	SEC. 3, T17S, R24E	SEC. 16, T4N, R8E	SEC. 16, T15S, R23E
OWNER	TENNECO OIL CO.	AMOCO PRODUCTION CO.	COSEKA RESOURCES (U.S.A.)
COMPLETED	08/04/79	03/27/80	NOT GIVEN
SAMPLED	01/09/80	09/16/80	08/27/80
FORMATION	CRET-DAKOTA	JURA-NUGGET	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	570	575
DEPTH, FEET	4634	13350	8600
WELLHEAD PRESSURE,PSIG	920	2950	600
OPEN FLOW, MCFD	2500	5000	756
COMPONENT, MOLE PCT			
METHANE	78.5	77.4	63.8
ETHANE	5.2	13.0	4.8
PROPANE	2.1	5.1	1.2
N-BUTANE	0.6	1.0	0.3
ISOBUTANE	0.4	0.8	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	12.1	1.7	28.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.8
HELIUM	0.13	0.02	0.03
HEATING VALUE*	1005	1232	794
SPECIFIC GRAVITY	0.676	0.718	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 199 SAMPLE 15995	INDEX 200 SAMPLE 16069	INDEX 201 SAMPLE 16096
STATE	UTAH	UTAH	WEST VIRGINIA
COUNTY	UINTAH	UINTAH	FAYETTE
FIELD	CHAPITA	NATURAL BUTTES	HAWK'S NEST
WELL NAME	CHAPITA UNIT 4525	NBU-36Y	M. D. STEELE NO. 1
LOCATION	SEC. 25, T 9S, R22E	SEC. 35, T9S, R21E	LAUREL CREEK
OWNER	BELCO PETROLEUM CORP.	INTEGRITY OIL & GAS CO.	CABOT OIL & GAS CORP.
COMPLETED	01/22/80	03/18/80	10/20/78
SAMPLED	06/26/80	09/18/80	10/09/80
FORMATION	EOCE-WASATCH	EOCE-WASATCH	MISS-RAVENCLIFF
GEOLOGIC PROVINCE CODE	575	575	160
DEPTH, FEET	5893	5538	1260
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2300	130
OPEN FLOW, MCFD	2250	NOT GIVEN	210
COMPONENT, MOLE PCT			
METHANE	91.2	92.5	90.5
ETHANE	5.2	4.3	5.8
PROPANE	1.7	1.2	1.1
N-BUTANE	0.4	0.3	0.2
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.3	0.4	1.3
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.01	TRACE	0.04
HEATING VALUE*	1103	1090	1076
SPECIFIC GRAVITY	0.619	0.608	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 202 SAMPLE 15917	INDEX 203 SAMPLE 15922	INDEX 204 SAMPLE 16034
STATE	WEST VIRGINIA	WEST VIRGINIA	WYOMING
COUNTY	MINERAL	RALEIGH	CARBON
FIELD	NOT GIVEN	SHADY SPRING DISTRICT	WAMSUTTER
WELL NAME	MASTELLAR COAL CO, 20364-T	NO. 20622-T	CHAMPLIN 222D NO. 1
LOCATION	NEW CREEK DISTRICT	CRAB ORCHARD QUADRANGLE	SEC.27,T19N,R93W
OWNER	COLUMBIA GAS	COLUMBIA GAS TRANS. CORP.	AMOCO PRODUCTION CO.
COMPLETED	12/20/78	09/24/79	NOT GIVEN
SAMPLED	03/03/80	03/11/80	08/14/80
FORMATION	DEVO-ORISKANY	MISS-WEIR	CRET-ALMOND
GEOLOGIC PROVINCE CODE	160	160	535
DEPTH, FEET	8494	3298	8970
WELLHEAD PRESSURE,PSIG	3600	928	NOT GIVEN
OPEN FLOW, MCFD	9728	3998	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.6	93.8	77.3
ETHANE	1.6	1.3	10.6
PROPANE	0.1	0.4	7.1
N-BUTANE	0.0	0.0	1.0
ISOBUTANE	0.0	0.4	1.1
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	0.0	0.7	TRACE
HEXANES PLUS	0.0	1.3	0.1
NITROGEN	0.4	1.4	0.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	2.2
HELIUM	0.04	0.08	0.01
HEATING VALUE*	1020	1108	1250
SPECIFIC GRAVITY	0.565	0.627	0.742

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 205 SAMPLE 16074	INDEX 206 SAMPLE 16152	INDEX 207 SAMPLE 15976
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	LYSITE	MONETA HILLS	PAVILLION
WELL NAME	LONG BUTTE NO. 1	MONETA NO. 1-29	USA-TRIBAL NO. 22-10
LOCATION	SEC. 32, T39N, R91W	SEC. 29, T38N, R90W	SEC. 10, T3N, R2E
OWNER	MONSANTO CO.	COLUMBIA GAS DEVELOPMENT	SHELL OIL CO.
COMPLETED	NOT GIVEN	01/25/80	12/05/79
SAMPLED	09/16/80	12/12/80	05/29/80
FORMATION	CRET-MESAVERDE	CRET-SHANNON	EOCE-WIND RIVER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	NOT GIVEN	20065	3274
WELLHEAD PRESSURE,PSIG	7250	10000	461
OPEN FLOW, MCFD	NOT GIVEN	1000	500
COMPONENT, MOLE PCT			
METHANE	95.7	95.8	35.3
ETHANE	0.2	0.2	1.4
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.1	0.3	48.9
OXYGEN	0.0	0.1	13.4
ARGON	0.0	TRACE	0.6
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.9	3.4	0.1
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	973	983	390
SPECIFIC GRAVITY	0.593	0.595	0.846

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 208 SAMPLE 15977	INDEX 209 SAMPLE 16035	INDEX 210 SAMPLE 16081
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	JOHNSON
FIELD	PAVILLION	PAVILLION	LITTLE BUGHER DRAW
WELL NAME	USA-TRIBAL NO. 22-10	SHELL TRIBAL NO. 22-10	LITTLE BUGHER DRAW NO. 1
LOCATION	SEC. 10, T3N, R2E	SEC. 10, T3N, R2E	SEC. 12, T49N, R78W
OWNER	SHELL OIL CO.	SHELL OIL CO.	ELF AQUITAINE OIL & GAS
COMPLETED	12/05/79	12/05/79	09/23/80
SAMPLED	05/29/80	08/11/80	09/24/80
FORMATION	EOCE-FT UNION	EOCE-WIND RIVER	CRET-MOWRY
GEOLOGIC PROVINCE CODE	530	530	515
DEPTH, FEET	4819	3274	11039
WELLHEAD PRESSURE,PSIG	1801	461	4400
OPEN FLOW, MCFD	2431	2431	2500
COMPONENT, MOLE PCT			
METHANE	94.9	96.2	78.5
ETHANE	3.7	2.9	12.5
PROPANE	0.3	0.2	4.7
N-BUTANE	0.1	0.1	1.1
ISOBUTANE	0.1	0.1	0.6
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.5	0.4	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	1.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1056	1044	1230
SPECIFIC GRAVITY	0.591	0.578	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 211 SAMPLE 16019	INDEX 212 SAMPLE 16100	INDEX 213 SAMPLE 16082
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	SUBLETTE	SUBLETTE
FIELD	WILSON RANCH	TIP TOP	WILDCAT
WELL NAME	CHRISMAN, ET.AL NO. 1	TIP TOP NO. T54-2G	RILEY RIDGE FEDERAL NO.8-24
LOCATION	SEC. 18, T20N, R112W	SEC. 2, T28N, R114W	SEC. 8, T29N, R114W
OWNER	C & K PETROLEUM INC.	MOBIL OIL CORP.	AMERICAN QUASAR PET. CO.
COMPLETED	08/18/78	NOT GIVEN	NOT GIVEN
SAMPLED	07/24/80	10/13/80	09/24/80
FORMATION	CRET-FRONTIER, 2ND	MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11147	14627	14437
WELLHEAD PRESSURE,PSIG	2300	2910	3050
OPEN FLOW, MCFD	2503	NOT GIVEN	150000
COMPONENT, MOLE PCT			
METHANE	81.0	18.7	19.4
ETHANE	11.8	0.1	0.1
PROPANE	4.0	0.1	0.0
N-BUTANE	0.7	0.0	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.8	7.3	7.3
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	3.5	4.2
CARBON DIOXIDE	0.5	69.7	68.4
HELIUM	0.01	0.59	0.54
HEATING VALUE*	1202	216	225
SPECIFIC GRAVITY	0.690	1.288	1.277

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 214 SAMPLE 16083	INDEX 215 SAMPLE 16151	INDEX 216 SAMPLE 15870
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SWEETWATER	SWEETWATER
FIELD	WILDCAT	BRUFF	BUSH LAKE
WELL NAME	RILEY RIDGE FEDERAL NO.8-24	GOVT. R. M. DONLEY NO. 1	FEDERAL Q NO. 1
LOCATION	SEC. 8, T29N, R114W	SEC. 2, T18N, R112W	SEC. 28, T25N, R96W
OWNER	AMERICAN QUASAR PET. CO.	TEXACO INC.	TEXAS OIL & GAS CORP.
COMPLETED	NOT GIVEN	08/18/80	06/25/78
SAMPLED	09/24/80	12/15/80	12/18/79
FORMATION	MISS-MADISON	CRET-DAKOTA	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14437	12030	12750
WELLHEAD PRESSURE,PSIG	3050	5400	7700
OPEN FLOW, MCFD	150000	10240	2100
COMPONENT, MOLE PCT			
METHANE	18.8	88.1	92.9
ETHANE	0.1	6.7	0.8
PROPANE	0.0	2.1	0.1
N-BUTANE	0.0	0.4	0.0
ISOBUTANE	0.0	0.4	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	7.4	0.8	0.4
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	3.7	0.0	0.0
CARBON DIOXIDE	69.4	0.7	5.7
HELIUM	0.56	0.01	TRACE
HEATING VALUE*	216	1121	958
SPECIFIC GRAVITY	1.284	0.642	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1980

	INDEX 217 SAMPLE 15901	INDEX 218 SAMPLE 16070	INDEX 219 SAMPLE 15947
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	UINTA	UINTA
FIELD	CAMEL ROCK	CLEAR CREEK	YELLOW CREEK
WELL NAME	AMOCO-CHAMPLIN NO. 33-34	PRV22-9B	AMOCO-ANSCHUTZ NO. 1
LOCATION	SEC. 33, T18N, R102W	SEC. 9, T16N, R119W	SEC. 11, T14N, R121W
OWNER	HOUSTON OIL & MINERALS CORP.	CHEVRON U.S.A. INC.	AMOCO PRODUCTION CO.
COMPLETED	11/07/79	04/22/80	12/04/79
SAMPLED	02/08/80	09/17/80	04/18/80
FORMATION	CRET-FRONTIER	JURA-NUGGET	JURA-TWINCREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5138	8713	5968
WELLHEAD PRESSURE,PSIG	1750	NOT GIVEN	900
OPEN FLOW, MCFD	7062	3228	3500
COMPONENT, MOLE PCT			
METHANE	87.1	79.3	77.6
ETHANE	5.3	11.0	9.7
PROPANE	1.3	4.8	4.3
N-BUTANE	0.2	1.1	1.3
ISOBUTANE	0.1	1.0	1.3
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	TRACE	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	5.0	1.9	4.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.43	0.02	0.05
HEATING VALUE*	1021	1231	1208
SPECIFIC GRAVITY	0.618	0.714	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 1 SAMPLE 15872	INDEX 2 SAMPLE 15871	INDEX 3 SAMPLE 15873
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KINGS
FIELD	COLES LEVEE N	COLES LEVEE S	KETTLEMAN HILLS
PLANT NAME	METER NO. 4702	METER NO. 4709	METER NO. 4228
LOCATION	10 IN. LINE 103	34 IN. LINE 225	26 IN. LINE
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	12/28/79	12/31/79	01/01/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
PRESSURE,PSIG	430	650	400
FLOW,MCFD	3000	70000	5000
COMPONENT, MOLE PCT			
METHANE	88.9	91.7	93.5
ETHANE	7.8	6.2	4.4
PROPANE	0.1	0.7	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	0.4	1.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.0	1.1	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1043	1058	1031
SPECIFIC GRAVITY	0.618	0.605	0.592

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 4 SAMPLE 16120	INDEX 5 SAMPLE 16010	INDEX 6 SAMPLE 16012
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LOGAN	MORGAN
FIELD	ALL COLORADO	ALL S WYOMING	WYOMING & KANSAS
PLANT NAME	TIFFANY COMPRESSOR STA.	MERINO GATE VALVE	FT. MORGAN STORAGE
LOCATION	8 IN.	20 IN. MERINO W	16 IN.
OWNER	WESTERN SLOPE GAS CO.	CITIES SERVICE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/28/80	07/15/80	07/15/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	540	540
PRESSURE,PSIG	750	560	1600
FLOW,MCFD	14500	60000	53000
COMPONENT, MOLE PCT			
METHANE	95.0	84.0	89.3
ETHANE	1.2	8.8	6.9
PROPANE	0.2	3.1	0.8
N-BUTANE	TRACE	0.7	0.1
ISOBUTANE	0.1	0.6	0.1
N-PENTANE	TRACE	0.2	TRACE
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	TRACE	0.0	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.3	2.3	2.0
HELIUM	0.01	0.01	0.03
HEATING VALUE*	998	1155	1056
SPECIFIC GRAVITY	0.598	0.681	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 7 SAMPLE 16011	INDEX 8 SAMPLE 16009	INDEX 9 SAMPLE 16008
STATE	COLORADO	NEBRASKA	NEBRASKA
COUNTY	WELD	CHEYENNE	DEVEL
FIELD	WESTERN WYOMING	WYOMING-PINE BLUFF AREA	HUNTSMAN & CASPER AREA
PLANT NAME	CHEYENNE COMPRESSOR STA.	HUNTSMAN COMPRESSOR STA.	BIG SPRINGS COMPRESSOR STA.
LOCATION	22 IN. & 24 IN.	OUTLET	12 IN.
OWNER	COLORADO INTERSTATE GAS CO.	KANSAS NEBRASKA NAT. GAS CO.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	07/14/80	07/14/80	07/14/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	540
PRESSURE,PSIG	540	555	895
FLOW,MCFD	315000	27000	100000
COMPONENT, MOLE PCT			
METHANE	89.1	89.4	89.7
ETHANE	5.8	6.3	6.0
PROPANE	1.1	1.1	1.0
N-BUTANE	0.2	0.3	0.3
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.7	0.9	1.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.5	1.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1059	1078	1069
SPECIFIC GRAVITY	0.629	0.629	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 10 SAMPLE 16123	INDEX 11 SAMPLE 16113	INDEX 12 SAMPLE 16109
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	MCKINLEY
FIELD	PERMIAN	PERMIAN BASIN	O'KUTZ & JICARILLA
PLANT NAME	ROSWELL COMPRESSOR STA.	ROSWELL COMPRESSOR STA.	STAR LAKE COMPRESSOR
LOCATION	30 IN. OUTLET	30 IN.	OUTLET 20 IN.
OWNER	TRANSWESTERN PIPELINE CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	10/23/80	10/23/80	10/24/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	580
PRESSURE, PSIG	1008	718	600
FLOW, MCFD	700000	600000	150000
COMPONENT, MOLE PCT			
METHANE	94.1	88.7	94.9
ETHANE	2.8	6.7	3.6
PROPANE	0.7	0.8	0.4
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	TRACE	0.1	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.1	TRACE
NITROGEN	1.0	2.9	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1057	1051	1044
SPECIFIC GRAVITY	0.602	0.617	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 13 SAMPLE 16111	INDEX 14 SAMPLE 16116	INDEX 15 SAMPLE 16114
STATE	NEW MEXICO	TEXAS	TEXAS
COUNTY	MCKINLEY	CRANE	EL PASO
FIELD	SAN JUAN BASIN	WEST TEXAS AREA	PERMIAN BASIN N.
PLANT NAME	GALLUP COMPRESSOR STA.	CRANE COMPRESSOR STA.	EL PASO COMPRESSOR STA.
LOCATION	24 IN. GALLUP "B"	36 IN.	A & B LINES
OWNER	EL PASO NATURAL GAS CO.	VALERO TRANSMISSION CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/27/80	10/21/80	10/22/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	430	465
PRESSURE,PSIG	560	925	552
FLOW,MCFD	400000	350000	1179000
COMPONENT, MOLE PCT			
METHANE	89.1	96.4	91.8
ETHANE	7.5	1.5	4.8
PROPANE	1.6	0.2	1.1
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	0.5	0.8	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.0	0.2
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1085	1012	1060
SPECIFIC GRAVITY	0.622	0.583	0.605

* CALCULATED GROSS BTU PER CU.FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 16 SAMPLE 16115	INDEX 17 SAMPLE 16110	INDEX 18 SAMPLE 16121
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EL PASO	LAMB	LYNN
FIELD	WAHA AREA S.	PERMIAN BASIN	WEST TEXAS PERMIAN BASIN
PLANT NAME	EL PASO COMPRESSOR STA.	DIMMIT COMPRESSOR STA.	TAHOKA COMPRESSOR STA.
LOCATION	C LINE 30 IN.	24 IN. OUTLET	OUTLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	PIONEER CORP.
SAMPLED	10/22/80	10/20/80	10/20/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	465	435	430
PRESSURE,PSIG	812	725	450
FLOW,MCFD	623000	130000	70000
COMPONENT, MOLE PCT			
METHANE	96.1	88.0	93.6
ETHANE	1.4	5.4	3.2
PROPANE	0.4	0.8	0.7
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	4.4	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.0	0.1
HELIUM	0.03	0.05	0.03
HEATING VALUE*	1017	1025	1040
SPECIFIC GRAVITY	0.583	0.625	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 19 SAMPLE 16117	INDEX 20 SAMPLE 16122	INDEX 21 SAMPLE 16118
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	GOMEZ	WEST TEXAS	WEST TEXAS GAS
PLANT NAME	GRAY RANCH COMPRESSOR STA.	WAHA COMPRESSOR STA.	WAHA COMPRESSOR STA.
LOCATION	30 IN.	36 IN. OUTLET	OUTLET
OWNER	VALERO TRANSMISSION CO.	LONE STAR GAS CO.	OASIS PIPE LINE CO.
SAMPLED	10/21/80	10/21/80	10/21/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
PRESSURE, PSIG	700	700	900
FLOW, MCFD	NOT GIVEN	220000	380000
COMPONENT, MOLE PCT			
METHANE	86.6	95.5	96.5
ETHANE	6.7	2.0	1.3
PROPANE	2.3	0.5	0.2
N-BUTANE	0.6	0.1	0.1
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.8	1.1	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.7	1.1
HELIUM	0.08	0.02	0.02
HEATING VALUE*	1109	1028	1015
SPECIFIC GRAVITY	0.654	0.587	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 22 SAMPLE 16003	INDEX 23 SAMPLE 16119	INDEX 24 SAMPLE 16004
STATE	UTAH	UTAH	UTAH
COUNTY	CARBON	SAN JUAN	SUMMIT
FIELD	VERNAL & COLORADO	SAN JUAN BASIN	SW WYO., NW COLO., & NE UTAH
PLANT NAME	PRICE STA.	MOAB COMPRESSOR STA.	COALVILLE STA.
LOCATION	20 IN.	26 IN. OUTLET	INLET
OWNER	NOT GIVEN	NORTHWEST PIPELINE CORP.	MOUNTAIN FUEL SUPPLY CO.
SAMPLED	07/09/80	10/27/80	07/10/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	575	585	570
PRESSURE,PSIG	421	750	400
FLOW,MCFD	64000	280000	48000
COMPONENT, MOLE PCT			
METHANE	89.5	90.2	83.6
ETHANE	6.3	6.4	9.5
PROPANE	1.3	1.5	1.9
N-BUTANE	0.2	TRACE	0.3
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.7	0.4	4.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.3	0.3
HELIUM	0.07	0.01	0.05
HEATING VALUE*	1077	1067	1094
SPECIFIC GRAVITY	0.621	0.614	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 25 SAMPLE 16001	INDEX 26 SAMPLE 16002	INDEX 27 SAMPLE 16005
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	NATRONA
FIELD	BIG PINEY, LABARGE AREA	COLO. WYO., & UTAH	BEAVER CREEK & N GRIEVE
PLANT NAME	OPAL GASOLINE	KEMMERER COMPRESSOR STA.	NEW TOWN BORDER METER
LOCATION	30 IN.	26 IN.	16 IN.
OWNER	NORTHWEST PIPELINE CORP.	NORTHWEST PIPELINE CORP.	NORTHERN UTILITIES, INC.
SAMPLED	07/10/80	07/10/80	07/11/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	530
PRESSURE,PSIG	700	600	200
FLOW,MCFD	161000	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	90.7	91.5	89.5
ETHANE	5.5	5.7	7.4
PROPANE	2.0	0.8	0.3
N-BUTANE	0.4	0.1	TRACE
ISOBUTANE	0.3	0.1	0.0
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	0.6	0.8	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	2.2
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1106	1057	1047
SPECIFIC GRAVITY	0.623	0.605	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1980

	INDEX 28 SAMPLE 16007	INDEX 29 SAMPLE 16006
STATE	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA
FIELD	POWELL & MCCULLOCK	W. WYOMING TO CASPER
PLANT NAME	NORTHERN PIPELINE METER	KNNG SUCTION METER
LOCATION	6 IN.	20 IN.
OWNER	NORTHERN UTILITIES, INC.	KANSAS-NEBRASKA NAT. GAS CO.
SAMPLED	07/11/80	07/11/80
FORMATION	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	530	530
PRESSURE,PSIG	200	375
FLOW,MCFD	9000	40000
COMPONENT, MOLE PCT		
METHANE	70.1	92.3
ETHANE	15.5	3.9
PROPANE	2.6	1.2
N-BUTANE	0.3	0.4
ISOBUTANE	0.1	0.2
N-PENTANE	TRACE	0.1
ISOPENTANE	TRACE	0.2
CYCLOPENTANE	TRACE	0.1
HEXANES PLUS	TRACE	0.1
NITROGEN	7.7	0.4
OXYGEN	1.9	0.0
ARGON	0.1	TRACE
HYDROGEN	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0
CARBON DIOXIDE	1.5	1.1
HELIUM	0.01	0.01
HEATING VALUE*	1069	1078
SPECIFIC GRAVITY	0.720	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES DURING 1980

	INDEX 4 SAMPLE 16038	INDEX 5 SAMPLE 16039	INDEX 6 SAMPLE 16040
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	TITA	TITA	TITA
WELL NAME	TITA NO. 3-UM	TITA NO. 13-T	TITA NO. 7-B
LOCATION	ROBORE	ROBORE	ROBORE
OWNER	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	01/30/78	11/06/77	06/16/77
SAMPLED	07/24/80	07/24/80	07/24/80
FORMATION	CARB-TUPAMBI	CARB-TUPAMBI	CARB-TUPAMBI
DEPTH, FEET	6423	6454	6434
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.6	83.8	81.9
ETHANE	7.1	7.2	7.5
PROPANE	4.2	4.2	4.6
N-BUTANE	1.3	1.3	1.4
ISOBUTANE	0.7	0.6	0.8
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.3	0.6
NITROGEN	3.6	1.9	2.2
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1180	1196	1226
SPECIFIC GRAVITY	0.703	0.691	0.713

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES DURING 1980

	INDEX 7 SAMPLE 16041	INDEX 8 SAMPLE 16043
COUNTRY	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ
FIELD	TITA	TITA
WELL NAME	TITA NO. 6-M	TITA NO. 5-B
LOCATION	ROBORE	ROBORE
OWNER	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	05/11/77	03/28/77
SAMPLED	07/24/80	07/24/80
FORMATION	CARB-TUPAMBI	CARB-TUPAMBI
DEPTH, FEET	6342	6498
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT		
METHANE	82.8	80.5
ETHANE	7.4	8.4
PROPANE	4.5	5.4
N-BUTANE	1.4	1.6
ISOBUTANE	0.6	0.8
N-PENTANE	0.3	0.4
ISOPENTANE	0.3	0.3
CYCLOPENTANE	0.1	0.1
HEXANES PLUS	0.3	0.3
NITROGEN	2.2	2.2
OXYGEN	0.0	0.0
ARGON	TRACE	TRACE
HYDROGEN	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0
CARBON DIOXIDE	0.1	0.1
HELIUM	0.01	0.01
HEATING VALUE*	1200	1236
SPECIFIC GRAVITY	0.697	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES DURING 1980

	INDEX 1 SAMPLE 16042	INDEX 2 SAMPLE 16036	INDEX 3 SAMPLE 16037
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	SANTA CRUZ	TITA	TITA
WELL NAME	NO. 4-B	TITA NO. 1-T	TITA NO. 12-T
LOCATION	ROBORE	ROBORE	ROBORE
OWNER	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	01/26/77	08/17/76	10/14/77
SAMPLED	07/24/80	07/24/80	07/24/80
FORMATION	CARB-TUPAMBI	CARB-TUPAMBI	CARB-TUPAMBI
DEPTH, FEET	6477	6592	6375
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.4	83.4	70.0
ETHANE	7.3	7.1	6.2
PROPANE	4.6	4.3	4.1
N-BUTANE	1.6	1.4	1.5
ISOBUTANE	0.7	0.6	1.1
N-PENTANE	0.4	0.4	0.7
ISOPENTANE	0.4	0.4	0.8
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.3	0.3	1.2
NITROGEN	2.2	1.9	11.5
OXYGEN	0.0	0.0	2.5
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1216	1204	1151
SPECIFIC GRAVITY	0.707	0.695	0.793

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES DURING 1980

	INDEX 1 SAMPLE 16045	INDEX 2 SAMPLE 16044
COUNTRY	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	VICTORIA	VICTORIA
FIELD	BARRACOUTA	MARLIN
PLANT NAME	PLATFORM GAS	PLATFORM GAS
LOCATION	BASS STRAIT	BASS STRAIT
OWNER	ESSO/BHP	ESSO/BHP
SAMPLED	04/06/80	03/06/80
FORMATION	EOCE-	EOCE-
PRESSURE,PSIG	1510	1850
FLOW,MCFD	260000	410000
COMPONENT, MOLE PCT		
METHANE	85.7	80.7
ETHANE	5.9	7.3
PROPANE	3.0	4.9
N-BUTANE	0.6	1.4
ISOBUTANE	1.3	1.3
N-PENTANE	0.1	0.6
ISOPENTANE	0.5	0.8
CYCLOPENTANE	0.3	0.2
HEXANES PLUS	0.5	0.9
NITROGEN	1.6	0.5
OXYGEN	0.0	0.0
ARGON	0.0	0.0
HYDROGEN	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0
CARBON DIOXIDE	0.5	1.3
HELIUM	TRACE	TRACE
HEATING VALUE*	1178	1280
SPECIFIC GRAVITY	0.683	0.747

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 1 SAMPLE 14764	INDEX 2 SAMPLE 14777	INDEX 3 SAMPLE 14760
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	COOK INLET BASIN	COOK INLET N	GRANITE POINT
WELL NAME	A-8S	NORTH COOK INLET UNIT A-5	GRANITE POINT NO. 20
LOCATION	SEC. 4, T9N, R13W	SEC. 6, T11N, R9W	SEC. 31, T11N, R11W
OWNER	UNION OIL CO. OF CALIFORNIA	PHILLIPS PETROLEUM CO.	AMOCO PRODUCTION CO.
COMPLETED	11/11/67	08/14/69	05/04/68
SAMPLED	08/--/76	08/06/76	08/06/76
FORMATION	EOCE-TYONEK	EOCE-KENAI	EOCE-TYONEK & HEMLOCK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	4450	8690
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1542	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	22230	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.1	99.1	67.0
ETHANE	3.4	0.1	10.1
PROPANE	4.5	0.1	10.3
N-BUTANE	1.7	0.0	3.7
ISOBUTANE	1.5	0.0	2.3
N-PENTANE	0.4	0.0	0.6
ISOPENTANE	0.9	0.0	2.1
CYCLOPENTANE	0.2	0.0	0.3
HEXANES PLUS	0.3	0.0	0.7
NITROGEN	1.5	0.6	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.3
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1226	1008	1492
SPECIFIC GRAVITY	0.712	0.559	0.892

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 4 SAMPLE 14758	INDEX 5 SAMPLE 14759	INDEX 6 SAMPLE 14762
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MCARTHUR RIVER	MCARTHUR RIVER	MCARTHUR RIVER
WELL NAME	K-17	K-30 SHORT	G-14 SHORT
LOCATION	SEC. 21, T9N, R13W	SEC. 21, T9N, R13W	SEC. 29, T9N, R13W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIFORNIA
COMPLETED	--/--/73	04/29/70	10/07/68
SAMPLED	08/06/76	08/06/76	08/--/76
FORMATION	EOCE-HEMLOCK	EOCE-TYONEK, G	EOCE-TYONEK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	11423	10876	4500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.8	82.3	98.2
ETHANE	5.5	4.0	0.1
PROPANE	6.2	4.7	TRACE
N-BUTANE	2.4	1.8	0.0
ISOBUTANE	1.3	1.1	0.0
N-PENTANE	0.5	0.4	0.0
ISOPENTANE	0.8	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	10.9	4.9	1.5
OXYGEN	1.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1176	1178	997
SPECIFIC GRAVITY	0.787	0.710	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 7 SAMPLE 14776	INDEX 8 SAMPLE 14780	INDEX 9 SAMPLE 14781
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MCARTHUR RIVER	MCARTHUR RIVER	MIDDLE GROUND SHOAL
WELL NAME	NO. K-30 LONG	NO. G-33 LONG	NO. 13
LOCATION	SEC. 21, T9N, R13W	SEC. 29, T9N, R13W	SEC. 31, T9N, R12W
OWNER	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIFORNIA	AMOCO PRODUCTION CO.
COMPLETED	04/29/70	03/18/70	01/01/68
SAMPLED	08/06/76	08/04/76	08/--/76
FORMATION	EOCE-KENAI	EOCE-KENAI	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	12106	10086	8425
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	726	600
COMPONENT, MOLE PCT			
METHANE	80.1	61.3	64.6
ETHANE	4.8	12.1	13.7
PROPANE	5.3	10.5	10.9
N-BUTANE	2.0	2.7	3.6
ISOBUTANE	1.0	1.6	1.8
N-PENTANE	0.4	0.3	0.6
ISOPENTANE	0.5	0.7	1.5
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	5.4	10.4	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1189	1312	1482
SPECIFIC GRAVITY	0.724	0.855	0.878

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 10 SAMPLE 14782	INDEX 11 SAMPLE 14761	INDEX 12 SAMPLE 14766
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MIDDLE GROUND SHOAL	NICOLAI CREEK	NICOLAI CREEK
WELL NAME	NO. 6	NO. 2	NO. 3
LOCATION	SEC. 31, T9N, R12W	SEC. 22, T11N, R12W	SEC. 20, T11N, R12W
OWNER	AMOCO PRODUCTION CO.	TEXACO INC.	TEXACO INC.
COMPLETED	05/01/76	10/24/66	05/04/67
SAMPLED	08/--/76	08/--/76	08/--/76
FORMATION	EOCE-TYONEK	EOCE-TYONEK	EOCE-BELUGA & TYONEK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	5782	3420	1900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	98.2	98.1
ETHANE	6.1	0.2	0.1
PROPANE	8.0	0.1	0.1
N-BUTANE	3.3	TRACE	0.0
ISOBUTANE	1.8	TRACE	0.0
N-PENTANE	0.7	0.0	0.0
ISOPENTANE	1.3	0.1	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.4	TRACE	0.0
NITROGEN	3.0	1.3	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1361	1005	998
SPECIFIC GRAVITY	0.808	0.563	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 13 SAMPLE 14765	INDEX 14 SAMPLE 14771	INDEX 15 SAMPLE 14783
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	KENAI PENINSULA	KENAI PENINSULA
FIELD	TRADING BAY NE	KENAI	KENAI
WELL NAME	TS-2	NO. 41-7	NO. 34-31
LOCATION	SEC. 34, T10N, R13W	SEC. 7, T4N, R11W	SEC. 31, T5N, R11W
OWNER	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA
COMPLETED	08/29/68	NOT GIVEN	11/23/59
SAMPLED	08/--/76	08/05/76	08/05/76
FORMATION	EOCE-TYONEK & HEMLOCK	EOCE-TYONEK	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	9016	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2200	1500
OPEN FLOW, MCFD	192	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.5	98.8	98.7
ETHANE	5.7	0.3	0.1
PROPANE	7.1	0.1	TRACE
N-BUTANE	2.3	0.0	0.0
ISOBUTANE	2.0	0.0	0.0
N-PENTANE	0.5	0.0	0.0
ISOPENTANE	0.7	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	11.6	0.6	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1206	1009	1002
SPECIFIC GRAVITY	0.801	0.561	0.559

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 16 SAMPLE 14772	INDEX 17 SAMPLE 11554	INDEX 18 SAMPLE 12307
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI PENINSULA	NORTH SLOPE	NORTH SLOPE
FIELD	STERLING	PRUDHOE BAY	PRUDHOE BAY
WELL NAME	NO. 43-9	PRUDHOE NO. 1	PRUDHOE BAY STATE NO. 1
LOCATION	SEC. 9, T5N, R10W	NORTH SLOPE	SEC. 10, T11N, R14E
OWNER	UNION OIL CO. OF CALIFORNIA	ATLANTIC RICHFIELD CO.	ARCO & HUMBLE OIL & REFINING
COMPLETED	07/05/63	NOT GIVEN	NOT GIVEN
SAMPLED	08/05/76	NOT GIVEN	05/05/70
FORMATION	EOCE-STERLING	NOT GIVEN	PERM-SADLEROCHIT
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.3	78.8	78.3
ETHANE	0.2	5.2	5.2
PROPANE	TRACE	1.8	2.3
N-BUTANE	0.0	0.6	0.8
ISOBUTANE	0.0	TRACE	0.3
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	1.4	0.8	0.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	12.4	11.7
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	999	972	1007
SPECIFIC GRAVITY	0.562	0.737	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 19 SAMPLE 12308	INDEX 20 SAMPLE 10703	INDEX 21 SAMPLE 13278
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NORTH SLOPE	NOT GIVEN	NOT GIVEN
FIELD	PRUDHOE BAY	EXPLORATORY	NOT GIVEN
WELL NAME	SAG RIVER STATE NO. 1	NORTH FORK NO. 41-35	KEMIK NO. 1
LOCATION	SEC. 4, T10N, R15E	SEC. 35, T4S, R14W	SEC. 17, T1N, R20E
OWNER	ARCO & HUMBLE OIL & REFINING	STANDARD OIL CO. OF CALIF.	FOREST OIL CORP.
COMPLETED	NOT GIVEN	12/20/65	NOT GIVEN
SAMPLED	04/09/70	01/19/66	06/11/72
FORMATION	PERM-SADLEROCHIT	EOCE-KENAI	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	8025	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2813	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	98.1	96.4
ETHANE	7.1	0.3	0.3
PROPANE	3.1	0.1	0.1
N-BUTANE	0.7	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.2	1.2	1.2
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	14.1	0.2	2.0
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1018	1002	984
SPECIFIC GRAVITY	0.788	0.560	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 22 SAMPLE 11547	INDEX 23 SAMPLE 11240	INDEX 24 SAMPLE 10898
STATE	ALASKA	ARIZONA	ARKANSAS
COUNTY	NOT GIVEN	APACHE	FRANKLIN
FIELD	PRUDHOE BAY	WILDCAT	LONE ELM
WELL NAME	PRUDHOE BAY STATE NO. 1	NAVAJO Z NO. 1	NOEL LEWIS NO. 1
LOCATION	NOT GIVEN	SEC. 36, T41N, R30E	SEC. 28, T10N, R28W
OWNER	ATLANTIC RICHFIELD	TEXACO INC.	ARKANSAS WESTERN GAS CO.
COMPLETED	DRILL STEM TEST NO. 15	NOT GIVEN	11/11/66
SAMPLED	NOT GIVEN	NOT GIVEN	NOT GIVEN
FORMATION	NOT GIVEN	MISS-LEADVILLE	PENN-CASEY & HENSON
GEOLOGIC PROVINCE CODE	972	590	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3041
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	580
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	70.6	14.6	98.2
ETHANE	4.8	1.0	1.0
PROPANE	2.1	0.4	0.1
N-BUTANE	0.9	0.2	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	9.2	53.1	0.4
OXYGEN	2.1	0.0	0.0
ARGON	0.2	0.6	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	10.0	23.5	0.2
HELIUM	0.02	5.84	0.11
HEATING VALUE*	886	208	1015
SPECIFIC GRAVITY	0.761	1.006	0.564

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 25 SAMPLE 10899	INDEX 26 SAMPLE 12121	INDEX 27 SAMPLE 15815
STATE	ARKANSAS	ARKANSAS	CALIFORNIA
COUNTY	FRANKLIN	JOHNSON	COLUSA
FIELD	LONE ELM	SCRANTON	GRIMES SW
WELL NAME	NOEL LEWIS NO. 1	YEAGER NO. 1-C	ARBUCKLE ROAD NO. 1
LOCATION	SEC. 28, T10N, R28W	SEC. 20, T9N, R24W	SEC. 7, T14W, R1E
OWNER	ARKANSAS WESTERN GAS CO.	LEBEN DRILLING, INC.	GAS PRODUCING ENTERPRISES
COMPLETED	11/11/66	02/19/69	01/--/79
SAMPLED	NOT GIVEN	11/20/69	10/24/79
FORMATION	-KELLY	PENN-DUNN B	CRET-FORBES
GEOLOGIC PROVINCE CODE	345	345	730
DEPTH, FEET	3967	5376	8378
WELLHEAD PRESSURE,PSIG	1160	1439	5087
OPEN FLOW, MCFD	5400	2050	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.0	94.5	99.2
ETHANE	1.0	1.1	0.2
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	2.5	0.5
OXYGEN	0.0	0.5	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.1	0.1
HELIUM	0.12	0.06	TRACE
HEATING VALUE*	1013	980	1008
SPECIFIC GRAVITY	0.563	0.584	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 28 SAMPLE 7647	INDEX 29 SAMPLE 7449	INDEX 30 SAMPLE 11302
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	ORANGE	SAN JOAQUIN	SOLANO
FIELD	SUNSET BEACH	STATEN ISLAND	LINDSEY SLOUGH
WELL NAME	BOARD OF SUPERVISORS NO. 1	M&T NO. 2	PETERSEN ESTATE NO. 2
LOCATION	SEC. 29, T5S, R11W	SEC. 14, T4N, R4E	SEC. 34, T5N, R2E
OWNER	GOLDEN WEST OIL CORP.	SUNRAY-BRAZOS-VISTARIO	AMERADA PETROLEUM CORP.
COMPLETED	10/21/55	08/10/59	NOT GIVEN
SAMPLED	08/12/60	02/14/60	NOT GIVEN
FORMATION	MIOC-	PENN-WEWOKA M	-PETERSON
GEOLOGIC PROVINCE CODE	760	730	730
DEPTH, FEET	7720	4096	9057
WELLHEAD PRESSURE,PSIG	1800	1625	NOT GIVEN
OPEN FLOW, MCFD	5000	8600	4728
COMPONENT, MOLE PCT			
METHANE	71.3	92.5	90.7
ETHANE	6.5	0.2	3.9
PROPANE	7.6	TRACE	1.3
N-BUTANE	4.5	0.0	0.4
ISOBUTANE	0.9	TRACE	0.1
N-PENTANE	1.4	0.0	0.0
ISOPENTANE	2.2	0.0	0.4
CYCLOPENTANE	1.7	0.0	0.2
HEXANES PLUS	1.6	0.0	0.1
NITROGEN	0.0	7.0	2.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.1	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1518	941	1069
SPECIFIC GRAVITY	0.906	0.584	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 31 SAMPLE 11503	INDEX 32 SAMPLE 11471	INDEX 33 SAMPLE 11424
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	LINDSEY SLOUGH	MILLAR W	RIO VISTA
WELL NAME	PETERSEN ESTATE NO. 2	CAMPBELL RANCH NO. 1	EMIGH NO. 12
LOCATION	SEC. 34, T5N, R2E	SEC. 4, T6N, R2E	SEC. 27, T4N, R2E
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	NOT GIVEN	10/25/68	01/15/68
SAMPLED	NOT GIVEN	05/09/68	03/29/68
FORMATION	-K-1 ZONE	NOT GIVEN	CRET-MCCORMICK
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	10122	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2500
OPEN FLOW, MCFD	5232	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	93.1	93.2
ETHANE	4.2	1.8	3.4
PROPANE	1.4	TRACE	1.0
N-BUTANE	0.4	0.0	0.4
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.6	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	5.2	4.9	1.5
OXYGEN	0.8	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1045	976	1062
SPECIFIC GRAVITY	0.643	0.584	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 34 SAMPLE 12145	INDEX 35 SAMPLE 14390	INDEX 36 SAMPLE 14909
STATE	CALIFORNIA	COLORADO	COLORADO
COUNTY	YOLO	ADAMS	HUERFANO
FIELD	SAXON	THIRD CREEK	SHEEP MOUNTAIN
WELL NAME	H&C-GLIDE COLBY NO. 5	STATE-A NO. 5	SHEEP MOUNTAIN UNIT NO. 7-9
LOCATION	SEC. 29, T7N, R3E	SEC. 36, T1S, R66W	SEC. 9, T27S, R70W
OWNER	SIGNAL OIL & GAS CO.	KOCH EXPLORATION CO.	ATLANTIC RICHFIELD CO.
COMPLETED	09/02/69	05/02/74	02/--/76
SAMPLED	11/13/69	06/17/75	02/15/77
FORMATION	CRET-STARKEY	CRET-DAKOTA J	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	730	540	455
DEPTH, FEET	6260	8178	3380
WELLHEAD PRESSURE,PSIG	2412	NOT GIVEN	739
OPEN FLOW, MCFD	4800	NOT GIVEN	11500
COMPONENT, MOLE PCT			
METHANE	77.9	71.3	24.5
ETHANE	0.7	15.1	0.6
PROPANE	0.2	6.7	TRACE
N-BUTANE	0.0	1.6	0.0
ISOBUTANE	0.0	0.8	0.0
N-PENTANE	0.0	0.4	0.0
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	19.9	1.2	10.9
OXYGEN	1.1	TRACE	0.2
ARGON	0.1	0.0	0.3
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.0	62.9
HELIUM	0.01	0.02	0.54
HEATING VALUE*	807	1301	259
SPECIFIC GRAVITY	0.650	0.781	1.216

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 37 SAMPLE 14962	INDEX 38 SAMPLE 14397	INDEX 39 SAMPLE 10700
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	SHEEP MOUNTAIN	BELL ROCK	CRAIG DOME
WELL NAME	SHEEP MOUNTAIN UNIT NO. 7	FEDERAL-DOLEZAL NO.4-1	CRAIG DOME NO. 1
LOCATION	SEC. 9, T27S, R70W	SEC. 4, T6N, R92W	SEC. 9, T6N, R91W
OWNER	ATLANTIC RICHFIELD CO.	FUELCO	VAUGHN PETROLEUM INC.
COMPLETED	02/--/76	NOT GIVEN	06/16/66
SAMPLED	04/07/77	06/18/75	08/24/66
FORMATION	CRET-DAKOTA	NOT GIVEN	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	455	535	535
DEPTH, FEET	3380	NOT GIVEN	7466
WELLHEAD PRESSURE,PSIG	680	NOT GIVEN	2890
OPEN FLOW, MCFD	11500	NOT GIVEN	1148
COMPONENT, MOLE PCT			
METHANE	17.6	98.0	91.6
ETHANE	0.5	0.3	2.6
PROPANE	0.0	0.1	0.8
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	6.5	1.2	3.4
OXYGEN	0.0	0.0	0.0
ARGON	0.2	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	74.8	0.4	0.8
HELIUM	0.41	0.04	0.07
HEATING VALUE*	187	1001	1028
SPECIFIC GRAVITY	1.313	0.566	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 40 SAMPLE 11610	INDEX 41 SAMPLE 15108	INDEX 42 SAMPLE 12716
STATE	COLORADO	COLORADO	KANSAS
COUNTY	MOFFAT	SAN MIGUEL	BARBER
FIELD	UNNAMED	ANDY'S MESA	BLUNK
WELL NAME	COLORADO FEDERAL C NO. 1	ANDY'S MESA UNIT NO. 10	BLUNK NO. 1
LOCATION	SEC. 22, T10N, R94W	SEC. 28, T44N, R16W	SEC. 25, T34S, R14W
OWNER	SKELLY OIL CO.	UNION OIL CO. OF CALIFORNIA	IMPERIAL OIL CO.
COMPLETED	02/24/68	07/26/77	12/07/71
SAMPLED	07/31/68	09/20/77	03/08/71
FORMATION	CRET-LEWIS	-LA SAL	MISS-
GEOLOGIC PROVINCE CODE	535	585	375
DEPTH, FEET	7536	7692	4695
WELLHEAD PRESSURE,PSIG	2625	1950	1200
OPEN FLOW, MCFD	1100	2450	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	91.8	87.6
ETHANE	6.8	1.8	5.0
PROPANE	3.3	0.4	2.0
N-BUTANE	0.9	0.2	0.7
ISOBUTANE	0.5	0.1	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.2	0.1	0.5
NITROGEN	0.7	5.0	2.9
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.01	0.07	0.12
HEATING VALUE*	1166	996	1121
SPECIFIC GRAVITY	0.662	0.600	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 43 SAMPLE 14566	INDEX 44 SAMPLE 13841	INDEX 45 SAMPLE 13842
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	LITTLE SANDY CREEK	MEAIRS	MEAIRS
WELL NAME	HARBAUGH NO. 1	KUMBERG"B"NO.1	KUMBERG"A"NO.1
LOCATION	SEC. 36, T32S, R10W	SEC. 14, T30S, R12W	SEC. 15, T30S, R12W
OWNER	OIL PROPERTY MANAGEMENT, INC	GLEN N. RUPE	GLEN N. RUPE
COMPLETED	10/30/75	06/22/73	06/19/73
SAMPLED	01/23/76	11/28/73	11/28/73
FORMATION	MISS-	PENN--TARKIO	PENN-HOWARD
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4288	3436	3146
WELLHEAD PRESSURE,PSIG	1329	1030	1120
OPEN FLOW, MCFD	4599	4177	3568
COMPONENT, MOLE PCT			
METHANE	88.1	88.7	86.0
ETHANE	5.3	3.8	4.2
PROPANE	2.3	1.6	1.8
N-BUTANE	0.6	0.4	0.6
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.6	4.5	6.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.11	0.18	0.23
HEATING VALUE*	1099	1050	1041
SPECIFIC GRAVITY	0.638	0.625	0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 46 SAMPLE 10720	INDEX 47 SAMPLE 11763	INDEX 48 SAMPLE 15692
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	CHAUTAUQUA	CHAUTAUQUA
FIELD	MILLS S	ELGIN E	OLIVER
WELL NAME	F. SPICER GAS UNIT NO. 1	ALLEN NO. 1	ROGERS B NO. 1
LOCATION	SEC. 34, T30S, R12W	SEC. 7, T35S, R11E	SEC. 2, T32S, R10E
OWNER	CONTINENTAL OIL CO.	WYATT PETROLEUM CORP.	RAM OIL CO.
COMPLETED	06/10/66	10/21/67	06/--/78
SAMPLED	09/14/66	02/17/69	07/05/79
FORMATION	PENN-DOUGLAS	MISS-CHAT	MISS-
GEOLOGIC PROVINCE CODE	375	365	365
DEPTH, FEET	3568	1882	2000
WELLHEAD PRESSURE,PSIG	1265	660	600
OPEN FLOW, MCFD	1250	3000	2200
COMPONENT, MOLE PCT			
METHANE	88.6	92.5	82.5
ETHANE	4.2	0.9	1.3
PROPANE	1.7	0.1	0.5
N-BUTANE	0.5	0.0	0.3
ISOBUTANE	0.3	0.0	0.2
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	4.2	4.2	12.3
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.9	1.2
HELIUM	0.20	0.30	1.24
HEATING VALUE*	1067	956	906
SPECIFIC GRAVITY	0.630	0.595	0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 49 SAMPLE 13144	INDEX 50 SAMPLE 15683	INDEX 51 SAMPLE 12759
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	EDWARDS
FIELD	LAYT	POSEY	ENLOW
WELL NAME	WALKER NO. 1	LINK-RICHARDSON NO. 2	SMITH NO. 1
LOCATION	SEC. 18, T32S, R8E	NOT GIVEN	SEC. 8, T24S, R16W
OWNER	BRUCE D. BENSON	PETROLEUM ENTERPRISES	IMPERIAL OIL CO.
COMPLETED	10/20/71	06/16/79	NOT GIVEN
SAMPLED	02/10/72	06/28/79	04/10/71
FORMATION	PENN-LAYTON	PERM-ADMIRE	MISS-
GEOLOGIC PROVINCE CODE	370	370	360
DEPTH, FEET	1950	676	NOT GIVEN
WELLHEAD PRESSURE,PSIG	400	230	1250
OPEN FLOW, MCFD	12000	1500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	54.2	78.2	88.7
ETHANE	3.9	4.8	3.6
PROPANE	2.5	2.3	1.5
N-BUTANE	0.5	0.7	0.5
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	37.3	12.8	4.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.87	0.38	0.45
HEATING VALUE*	719	993	1052
SPECIFIC GRAVITY	0.767	0.679	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 52 SAMPLE 15234	INDEX 53 SAMPLE 11624	INDEX 54 SAMPLE 15684
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	ELK
FIELD	MULL	NOT GIVEN	LOGSDON
WELL NAME	MULL NO. 2	TITUS NO. 1	TODD NO. 2
LOCATION	SEC. 33, T26S, R17W	SEC. 4, T26S, R19W	SEC. 28, T31S, R9E
OWNER	IMPERIAL OIL CO.	GLEN N. RUPE	PETROLEUM ENTERPRISES
COMPLETED	04/23/77	06/26/68	10/17/78
SAMPLED	02/10/78	08/15/68	06/28/79
FORMATION	PENN-CHEROKEE	MISS-	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	365
DEPTH, FEET	4545	4730	1766
WELLHEAD PRESSURE,PSIG	1320	1250	600
OPEN FLOW, MCFD	2777	1300	4000
COMPONENT, MOLE PCT			
METHANE	90.6	65.2	55.9
ETHANE	3.3	4.7	5.9
PROPANE	1.4	1.9	3.8
N-BUTANE	0.5	0.7	1.1
ISOBUTANE	0.2	0.3	0.6
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	2.9	24.2	30.7
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.28	1.97	1.15
HEATING VALUE*	1064	860	859
SPECIFIC GRAVITY	0.618	0.724	0.786

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 55 SAMPLE 10824	INDEX 56 SAMPLE 14631	INDEX 57 SAMPLE 14990
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GREELEY	HASKELL
FIELD	HUGOTON	BRADSHAW N	PANOMA
WELL NAME	KERMEYER ESTATE NO. 2	ROE NO. 1	ENGLER NO. B-1
LOCATION	SEC. 24, T29S, R37W	SEC. 29, T17S, R40W	SEC. 22, T27S, R34W
OWNER	ASHLAND OIL & REFINING CO.	R.C. BANKS	CITIES SERVICE OIL CO.
COMPLETED	09/17/66	09/24/75	NOT GIVEN
SAMPLED	12/16/66	04/02/76	05/06/77
FORMATION	PERM-CHASE GROUP	PENN-CHASE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2690	2937	2971
WELLHEAD PRESSURE,PSIG	343	NOT GIVEN	269
OPEN FLOW, MCFD	38000	2150	1000
COMPONENT, MOLE PCT			
METHANE	73.0	44.4	70.5
ETHANE	6.3	4.3	5.8
PROPANE	3.8	2.9	3.1
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.6	45.4	18.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.41	0.95	0.48
HEATING VALUE*	1017	668	958
SPECIFIC GRAVITY	0.712	0.820	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 58 SAMPLE 14155	INDEX 59 SAMPLE 15257	INDEX 60 SAMPLE 15093
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KIOWA	MEADE
FIELD	FANNIE	WELLSFORD NE	NOT GIVEN
WELL NAME	PRICE NO. 1	GRIMM NO. 1	CROOKED L. RANCH NO. 1
LOCATION	SEC. 4, T30S, R10W	SEC. 2, T28S, R16W	SEC. 21, T32S, R28W
OWNER	MALLONEE MAHONEY, INC.	IMPERIAL OIL CO.	IMPERIAL OIL CO.
COMPLETED	05/07/74	07/18/77	05/11/77
SAMPLED	09/--/74	04/--/78	09/--/77
FORMATION	MISS-	PENN-CHEROKEE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	375	360	360
DEPTH, FEET	4395	4635	5427
WELLHEAD PRESSURE,PSIG	1443	1370	1550
OPEN FLOW, MCFD	5200	4550	5173
COMPONENT, MOLE PCT			
METHANE	82.3	87.0	69.2
ETHANE	6.6	4.3	5.7
PROPANE	3.6	2.0	5.5
N-BUTANE	0.9	0.5	2.1
ISOBUTANE	0.5	0.3	1.2
N-PENTANE	0.2	0.2	0.9
ISOPENTANE	0.2	0.1	0.7
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	5.2	4.8	13.3
OXYGEN	TRACE	0.1	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.27	0.36	0.22
HEATING VALUE*	1115	1055	1169
SPECIFIC GRAVITY	0.676	0.635	0.797

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 61 SAMPLE 7906	INDEX 62 SAMPLE 12857	INDEX 63 SAMPLE 7931
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	HUGOTON	PANOMA
WELL NAME	FULKERSON NO. B-1	BECKER E-1	BREEDING C
LOCATION	SEC. 6, T35S, R41W	SEC. 24, T34S, R41W	SEC. 19, T31S, R39W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	11/16/60	NOT GIVEN	10/24/60
SAMPLED	03/20/61	06/23/71	04/17/61
FORMATION	PENN-TOPEKA	PERM-CHASE GROUP	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3186	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	396	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	21000	NOT GIVEN	547
COMPONENT, MOLE PCT			
METHANE	65.5	74.0	67.6
ETHANE	6.8	6.0	6.6
PROPANE	3.8	3.2	3.3
N-BUTANE	1.1	1.6	1.0
ISOBUTANE	0.5	0.0	0.6
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.2	0.6	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	20.9	13.9	19.4
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.60	0.39	0.50
HEATING VALUE*	964	1029	965
SPECIFIC GRAVITY	0.747	0.713	0.738

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 64 SAMPLE 14494	INDEX 65 SAMPLE 14550	INDEX 66 SAMPLE 12903
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	RUSH	SEWARD
FIELD	CHITWOOD	DYER	HUGOTON
WELL NAME	CHITWOOD NO. S-1	DYER NO. 1	GRIFFITH NO. 1
LOCATION	SEC. 23, T28S, R12W	SEC. 12, T19S, R16W	SEC. 19, T32S, R33W
OWNER	RAYMOND OIL CO., INC.	ICER ADDIS	CABOT CORP.
COMPLETED	05/02/75	NOT GIVEN	NOT GIVEN
SAMPLED	10/10/75	12/--/75	07/20/71
FORMATION	PERM-INDIAN CAVE	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	385	385	360
DEPTH, FEET	2646	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	880	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	81.4	74.2
ETHANE	3.2	4.0	5.8
PROPANE	1.4	1.7	3.4
N-BUTANE	0.3	0.5	1.0
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	10.8	10.1	14.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.0
HELIUM	0.43	1.54	0.44
HEATING VALUE*	956	980	1018
SPECIFIC GRAVITY	0.638	0.646	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 67 SAMPLE 15601	INDEX 68 SAMPLE 15631	INDEX 69 SAMPLE 15632
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	HITZ	KNOCHE	KNOCHE
WELL NAME	KOHRS UNIT NO. 1	VIRGIL KNOCHE NO. 1	VERLE KNOCHE NO. 1
LOCATION	SEC. 4, T24S, R12W	SEC. 5, T24S, R12W	SEC. 5, T24S, R12W
OWNER	WARREN-AMERICAN OIL CO.	DONALD D. ASH	DONALD D. ASH
COMPLETED	11/05/78	NOT GIVEN	NOT GIVEN
SAMPLED	04/22/79	06/05/79	06/05/79
FORMATION	ORDO-VIOLA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3815	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	940	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.7	65.4	65.6
ETHANE	4.1	4.5	4.5
PROPANE	3.3	3.8	3.8
N-BUTANE	1.0	1.3	1.2
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.6	22.3	22.3
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	1.22	1.26	1.24
HEATING VALUE*	829	932	931
SPECIFIC GRAVITY	0.754	0.744	0.742

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 70 SAMPLE 11641	INDEX 71 SAMPLE 11642	INDEX 72 SAMPLE 11643
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	GARRARD CO	GARRARD CO	GARRARD CO
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	LEONARD KIRBY NO. 1	LEONARD KIRBY NO. 1	LEONARD KIRBY NO. 1
LOCATION	CARTER COORDINATES 8-0-59	CARTER COORDINATES 8-0-59	CARTER COORDINATES 8-0-59
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	10/29/68	10/29/68	10/29/68
SAMPLED	09/--/68	09/--/68	09/--/68
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	300	300	300
DEPTH, FEET	4546	4546	4546
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	14.1	14.1	13.6
ETHANE	2.0	2.0	2.2
PROPANE	0.5	0.6	0.7
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	80.3	80.0	80.9
OXYGEN	0.1	0.1	0.1
ARGON	0.4	0.4	0.5
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.69	1.92	1.24
HEATING VALUE*	228	228	224
SPECIFIC GRAVITY	0.916	0.911	0.920

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 73 SAMPLE 11644	INDEX 74 SAMPLE 14031	INDEX 75 SAMPLE 15595
STATE	KENTUCKY	KENTUCKY	LOUISIANA
COUNTY	GARRARD CO	LESLIE	ASSUMPTION
FIELD	NOT GIVEN	LESLIE COUNTY	GRAVEYARD ISLAND
WELL NAME	LEONARD KIRBY NO. 1	C.A. DIXON NO. 2	MICHEIL NO. 1
LOCATION	CARTER COORDINATES 8-0-59	CARTER COORDINATE 2-H-73	SEC. 12, T14S, R12E
OWNER	TEXACO INC.	WISER OIL CO.	TEXAS CRUDE, INC.
COMPLETED	10/29/68	06/10/72	11/20/78
SAMPLED	09/--/68	06/26/74	04/02/79
FORMATION	NOT GIVEN	MISS-BIG LIME	NOT GIVEN
GEOLOGIC PROVINCE CODE	300	160	220
DEPTH, FEET	4574	2208	7678
WELLHEAD PRESSURE,PSIG	NOT GIVEN	425	1250
OPEN FLOW, MCFD	NOT GIVEN	5603	7
COMPONENT, MOLE PCT			
METHANE	14.5	81.1	88.6
ETHANE	2.2	10.4	4.5
PROPANE	0.6	3.9	2.1
N-BUTANE	0.3	0.8	1.0
ISOBUTANE	0.0	0.3	1.5
N-PENTANE	0.4	0.1	0.4
ISOPENTANE	0.0	0.2	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.5
NITROGEN	79.3	2.5	0.4
OXYGEN	0.1	TRACE	0.0
ARGON	0.4	TRACE	0.0
HYDROGEN	0.1	0.4	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.4
HELIUM	1.81	0.15	TRACE
HEATING VALUE*	240	1165	1185
SPECIFIC GRAVITY	0.911	0.677	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 76 SAMPLE 15534	INDEX 77 SAMPLE 11528	INDEX 78 SAMPLE 13806
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALCASIEU	CAMERON
FIELD	BECKWITH CREEK	MANCHESTER S	BLUE BUCK POINT
WELL NAME	LC NAVAL STORE NO. 1	FARMERS LAND & CANAL NO A-4	NOBLE-CRAIN NO. 2
LOCATION	SEC. 17, T8S, R9W	SEC. 27, T10S, R7W	T15S, R16W
OWNER	TEXAS PACIFIC OIL CO., INC.	COASTAL STATES GAS PROD. CO	TEXAS CRUDE, INC.
COMPLETED	NOT GIVEN	09/09/66	08/04/73
SAMPLED	12/07/78	NOT GIVEN	11/10/73
FORMATION	OLIG-NODOSARIO	OLIG-HACKBERRY	MIOC-8400 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8730	12886	8435
WELLHEAD PRESSURE,PSIG	3725	7900	3100
OPEN FLOW, MCFD	20	8600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.4	87.7	94.1
ETHANE	8.5	6.9	3.4
PROPANE	5.1	2.3	0.7
N-BUTANE	1.6	0.6	0.1
ISOBUTANE	1.7	0.4	0.2
N-PENTANE	0.4	0.2	TRACE
ISOPENTANE	0.8	0.2	TRACE
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	0.3	0.3	1.1
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.0	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1295	1131	1048
SPECIFIC GRAVITY	0.741	0.650	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 79 SAMPLE 15801	INDEX 80 SAMPLE 10039	INDEX 81 SAMPLE 15115
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	DESOTO	LAFAYETTE	LAFOURCHE
FIELD	KINGSTON	CADE	VALENTINE NE
WELL NAME	JOE E. MORAN NO. 1	BROUSSARD PLANT. INC. NO. 1	D. V. DOUSSEN O&PLNTG NO. 1
LOCATION	SEC. 15, T14N, R13W	SEC. 3, T11S, YOUNGSVILLE E	SEC.100, T17S, R20E
OWNER	ENERGY RESERVES GROUP, INC.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	12/13/77	08/19/64	07/27/76
SAMPLED	09/20/79	08/04/65	09/07/77
FORMATION	JURA-COTTON VALLEY	OLIG-MARTEX	MIOC-
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	9250	15155	12338
WELLHEAD PRESSURE,PSIG	3370	7725	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2014
COMPONENT, MOLE PCT			
METHANE	89.6	93.7	96.1
ETHANE	5.3	3.0	1.4
PROPANE	1.5	1.3	0.5
N-BUTANE	0.4	0.3	0.2
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.1	0.2	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.0	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1096	1067	1039
SPECIFIC GRAVITY	0.641	0.607	0.588

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 82 SAMPLE 14158	INDEX 83 SAMPLE 14676	INDEX 84 SAMPLE 12843
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	OUACHITA	PLAQUEMINES
FIELD	RUSTIN	DREW S	CROOKED BAYOU
WELL NAME	PAUL E. BLACKMOND NO. 1	MONROE SD. & GRAVEL NO. 1	STATE-SMITH NO. 1
LOCATION	SEC. 1, T18N, R2W	SEC. 6, T17N, R3E	SEC. 33, T15S, R15E
OWNER	CONSOLIDATED GAS SUPPLY CORP	JUSTISS-MEARS OIL CO., INC.	JONES-O"BRIEN INC.
COMPLETED	07/06/73	10/06/75	11/--/70
SAMPLED	10/24/74	05/11/76	05/29/71
FORMATION	JURA-HODCAW	JURA-COTTON VALLEY	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	220
DEPTH, FEET	9320	9551	8507
WELLHEAD PRESSURE,PSIG	3000	3150	3200
OPEN FLOW, MCFD	6000	1960	1550
COMPONENT, MOLE PCT			
METHANE	86.9	79.2	95.3
ETHANE	5.3	8.1	1.8
PROPANE	1.9	3.0	0.8
N-BUTANE	0.5	0.7	0.2
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.2	1.1	0.8
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	6.4	0.2
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	1081	1110	1061
SPECIFIC GRAVITY	0.659	0.730	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 85 SAMPLE 13817	INDEX 86 SAMPLE 15246	INDEX 87 SAMPLE 15553
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	POINTE COUPEE	POINTE COUPEE
FIELD	WEST DELTA BLOCK 55	FALSE RIVER	JUDGE DIGBY
WELL NAME	SL 2549 NO. 11	ALMA PLANTATION NO. 1	W. C. PARLANGE NO. 2
LOCATION	OFFSHORE	SEC. 87, T6S, R11E	SEC. 49, T5S, R9E
OWNER	CONTINENTAL OIL CO.	CHEVRON U.S.A., INC.	CHEVRON U.S.A. INC.
COMPLETED	12/14/72	06/04/75	06/02/78
SAMPLED	11/17/73	03/29/78	01/11/79
FORMATION	MIOC-	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3202	19800	20268
WELLHEAD PRESSURE,PSIG	1275	13100	11620
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.0	90.6	90.2
ETHANE	0.1	1.8	1.7
PROPANE	0.1	0.2	0.3
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	0.5	0.3
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	6.3	7.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1020	975	964
SPECIFIC GRAVITY	0.563	0.639	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 88 SAMPLE 13766	INDEX 89 SAMPLE 14374	INDEX 90 SAMPLE 14395
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST MARY	ST. JAMES	ST. MARY
FIELD	EUGENE ISLAND BLK. 314	BAYOU CITAMON	BALDWIN
WELL NAME	EUGENE ISLAND 314 NO. F-4	BOWIE LUMBER CO. NO. 1	J. R. HEINEN NO. 1
LOCATION	OFFSHORE	SEC. 18, T13S, R17E	SEC. 13, T14S, R9E
OWNER	FOREST OIL CORP.	UNION TEXAS PETROLEUM DIV.	SUN OIL CO.
COMPLETED	05/03/72	11/19/74	NOT GIVEN
SAMPLED	09/15/73	05/22/75	06/20/75
FORMATION	PLEI-R.C. SAND	MIOC-MA3	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2416	11450	NOT GIVEN
WELLHEAD PRESSURE,PSIG	900	6900	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.6	95.1	93.2
ETHANE	TRACE	2.5	3.3
PROPANE	TRACE	0.6	1.0
N-BUTANE	0.0	0.1	0.2
ISOBUTANE	0.0	0.3	0.3
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.3	0.5	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1009	1051	1060
SPECIFIC GRAVITY	0.557	0.590	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 91 SAMPLE 13765	INDEX 92 SAMPLE 13767	INDEX 93 SAMPLE 13768
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK 273	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273
WELL NAME	EUGENE ISLAND 273 NO. A-1	EUGENE ISLAND 273 NO. A-9	EUGENE ISLAND 273 NO. A-7
LOCATION	OFFSHORE	OFFSHORE	OFFSHORE
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	08/31/70	09/01/70	06/11/70
SAMPLED	09/15/73	09/15/73	09/15/73
FORMATION	PLEI-3500 FT. SAND	PLEI-4600 FT. SAND	PLEI-3100 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4982	4712	3219
WELLHEAD PRESSURE,PSIG	1340	1860	1300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.6	98.3	99.6
ETHANE	0.1	1.0	0.2
PROPANE	TRACE	0.3	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.3	0.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1011	1021	1013
SPECIFIC GRAVITY	0.558	0.565	0.557

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 94 SAMPLE 13771	INDEX 95 SAMPLE 13773	INDEX 96 SAMPLE 13775
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273
WELL NAME	EUGENE ISLAND 273 NO. A-5	EUGENE ISLAND 273 NO. A-3	EUGENE ISLAND 273 NO. A-2
LOCATION	OFFSHORE	OFFSHORE	OFFSHORE
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	08/26/70	08/23/70	04/27/70
SAMPLED	09/15/73	09/15/73	09/15/73
FORMATION	PLEI-4500 FT. SAND	PLEI-4900" SAND	PLEI-4000 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4746	4982	4130
WELLHEAD PRESSURE,PSIG	1650	1620	1620
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.1	97.1	99.2
ETHANE	0.5	1.6	0.2
PROPANE	0.1	0.6	TRACE
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.3	0.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1015	1031	1008
SPECIFIC GRAVITY	0.561	0.572	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 97 SAMPLE 13774	INDEX 98 SAMPLE 13769	INDEX 99 SAMPLE 13772
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK. 287	EUGENE ISLAND BLK. 292	EUGENE ISLAND BLK. 292
WELL NAME	EUGENE ISLAND 287 NO. D-2	EUGENE ISLAND 292 NO. B5-D	EUGENE ISLAND 292 NO. B1-D
LOCATION	OFFSHORE	OFFSHORE	OFFSHORE
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	04/05/71	12/31/69	01/16/70
SAMPLED	09/14/73	09/14/73	09/14/73
FORMATION	PLEI-E.E. SAND	PLEI-E.B. SAND	PLEI-D.B. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4928	4958	4208
WELLHEAD PRESSURE,PSIG	1840	1995	1675
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	95.8	98.1
ETHANE	1.5	2.3	1.3
PROPANE	0.6	0.9	0.2
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.4	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1034	1053	1022
SPECIFIC GRAVITY	0.575	0.586	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 100 SAMPLE 13776	INDEX 101 SAMPLE 13777	INDEX 102 SAMPLE 13778
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK. 292	EUGENE ISLAND BLK. 292	EUGENE ISLAND BLK. 292
WELL NAME	EUGENE ISLAND 292 NO. B-5	EUGENE ISLAND 287 NO. D-1	EUGENE ISLAND 287 NO. D-8
LOCATION	OFFSHORE	OFFSHORE	OFFSHORE
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	12/31/69	04/06/71	04/07/71
SAMPLED	09/14/73	09/14/73	09/14/73
FORMATION	PLEI-E.E. SAND	PLEI-E.H. SAND	PLEI-C.H. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5289	5488	3564
WELLHEAD PRESSURE,PSIG	1995	1930	1450
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.5	96.9	99.4
ETHANE	2.4	1.6	0.1
PROPANE	1.0	0.6	TRACE
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.3	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1055	1033	1009
SPECIFIC GRAVITY	0.590	0.575	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 103 SAMPLE 13770	INDEX 104 SAMPLE 10105	INDEX 105 SAMPLE 14250
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	TERREBONNE	TERREBONNE
FIELD	EUGENE ISLAND BLK. 307	FIDDLERS LAKE	FOUR ISLE DOME
WELL NAME	EUGENE ISLAND 307 NO. E-2	LL&E B-1	R. W. BUCKLEY U9 NO. 6
LOCATION	OFFSHORE	SEC. 12, T21S, R13E	SEC. 11, T12S, R16E
OWNER	FOREST OIL CORP.	TEXACO INC.	SUPERIOR OIL CO.
COMPLETED	12/30/71	NOT GIVEN	03/15/74
SAMPLED	09/15/73	09/05/65	12/27/74
FORMATION	PLEI-E.H. SAND	MIOC-	-NO. 92 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6084	15510	17203
WELLHEAD PRESSURE,PSIG	1650	10175	4550
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.8	89.9	88.6
ETHANE	1.8	5.5	5.0
PROPANE	0.6	1.8	2.0
N-BUTANE	0.1	0.5	0.3
ISOBUTANE	0.2	0.4	0.8
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.3	0.5	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	2.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1044	1109	1099
SPECIFIC GRAVITY	0.578	0.635	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 106 SAMPLE 13175	INDEX 107 SAMPLE 15347	INDEX 108 SAMPLE 14286
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	UNION	VERMILION
FIELD	GIBSON	MONROE	KAPLAN
WELL NAME	KLEINSCHMIDT NO. 1	C. H. ALLEN NO. 1	E. DARTEZ NO. 1
LOCATION	SEC. 5, T17S, R15E	SEC. 26, T22N, R2E	SEC. 14, T12S, R1E
OWNER	QUINTANA PETROLEUM CORP.	ERGON INC.	SUPERIOR OIL CO.
COMPLETED	10/20/71	NOT GIVEN	06/11/74
SAMPLED	04/03/72	08/15/78	02/25/75
FORMATION	MIOC-	CRET-	-MIOGYP
GEOLOGIC PROVINCE CODE	220	230	220
DEPTH, FEET	15136	2100	19434
WELLHEAD PRESSURE,PSIG	10500	420	NOT GIVEN
OPEN FLOW, MCFD	15000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.8	90.9	91.6
ETHANE	3.0	0.7	2.0
PROPANE	1.0	0.1	0.3
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.3	0.0	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.9	7.6	1.6
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	4.2
HELIUM	TRACE	0.08	TRACE
HEATING VALUE*	1059	949	983
SPECIFIC GRAVITY	0.613	0.597	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 109 SAMPLE 14878	INDEX 110 SAMPLE 13976	INDEX 111 SAMPLE 15517
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	KAPLAN S	REDFISH POINT	WILDCAT
WELL NAME	W. J. GREEN NO. 1	STATE LEASE 3306 NO. 3	BRUSSARD LAND CO. NO. 2
LOCATION	SEC. 23, T12S, R1E	OFFSHORE, T16S, R4E	SEC. 20, T14S, R2E
OWNER	SUPERIOR OIL CO.	GULF OIL CO.-U.S.	INEXCO OIL CO.
COMPLETED	NOT GIVEN	03/06/72	NOT GIVEN
SAMPLED	12/27/76	03/19/74	11/15/78
FORMATION	OLIG-CAMERINA	-N SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	17200	15629	NOT GIVEN
WELLHEAD PRESSURE,PSIG	9514	NOT GIVEN	4300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.6	80.5	91.0
ETHANE	8.3	5.1	4.9
PROPANE	3.6	4.8	1.5
N-BUTANE	0.9	1.7	0.4
ISOBUTANE	0.8	2.6	0.4
N-PENTANE	0.2	0.6	0.2
ISOPENTANE	0.3	0.9	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.7	0.2
NITROGEN	0.3	1.3	0.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	1.7	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1171	1284	1099
SPECIFIC GRAVITY	0.700	0.766	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 112 SAMPLE 15201	INDEX 113 SAMPLE 15810	INDEX 114 SAMPLE 13080
STATE	LOUISIANA	MICHIGAN	MICHIGAN
PARISH	W. BATON ROUGE	GRAND TRAVERSE	KALKASKA
FIELD	FALSE RIVER	UNION	BOARDMAN S
WELL NAME	POPLAR GROVE P & R CO. NO. 1	ST. UNION "O" NO. 1-22	UNIT NO. 1-4
LOCATION	SEC. 9, T6S, R11E	SEC. 22, T26N, R9W	SEC. 4, T26N, R8W
OWNER	CHEVRON U.S.A., INC.	AMOCO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	06/18/76	07/10/78	10/09/71
SAMPLED	01/13/78	10/23/79	10/12/71
FORMATION	CRET-TUSCALOOSA	SILU-NIAGARA	SILU-NIAGARA
GEOLOGIC PROVINCE CODE	220	305	305
DEPTH, FEET	19700	NOT GIVEN	6925
WELLHEAD PRESSURE,PSIG	12380	2022	2680
OPEN FLOW, MCFD	NOT GIVEN	12200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.5	87.8	76.7
ETHANE	2.7	5.6	6.2
PROPANE	0.3	2.5	3.2
N-BUTANE	0.1	0.9	0.7
ISOBUTANE	0.1	1.6	1.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.5	0.9	8.8
OXYGEN	0.1	0.0	2.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.4	TRACE	0.4
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	975	1175	1066
SPECIFIC GRAVITY	0.640	0.666	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 115 SAMPLE 13082	INDEX 116 SAMPLE 15210	INDEX 117 SAMPLE 13075
STATE	MICHIGAN	MISSISSIPPI	MISSISSIPPI
COUNTY	OSTEGO	HANCOCK	JEFFERSON
FIELD	CHESTER	WAVELAND	GWINVILLE
WELL NAME	CHESTER N NO. 1	CROSBY ESTATE "F" NO. 1	GWINVILLE GAS UNIT NO. 3
LOCATION	SEC. 15, T29N, R2W	SEC. 1, T8S, R15W	SEC. 21, T9N, R19W
OWNER	SHELL OIL CO.	PHILLIPS PETROLEUM CO.	HUMBLE OIL & REFINING CO.
COMPLETED	05/18/70	NOT GIVEN	02/24/71
SAMPLED	10/13/71	02/--/78	10/06/71
FORMATION	SILU-SALINA & NIAGARA	CRET-MOORINGSPORT	CRET-PALUXY
GEOLOGIC PROVINCE CODE	305	210	210
DEPTH, FEET	6352	13338	12256
WELLHEAD PRESSURE,PSIG	2250	3715	2450
OPEN FLOW, MCFD	NOT GIVEN	4100	7200
COMPONENT, MOLE PCT			
METHANE	82.2	92.0	95.8
ETHANE	7.2	0.8	0.3
PROPANE	3.6	0.3	0.1
N-BUTANE	0.7	0.2	0.1
ISOBUTANE	1.3	TRACE	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	3.6	1.5	1.7
OXYGEN	0.7	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	4.5	1.7
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1150	988	990
SPECIFIC GRAVITY	0.689	0.626	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 118 SAMPLE 13076	INDEX 119 SAMPLE 15548	INDEX 120 SAMPLE 15549
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON	JEFFERSON	LAWRENCE
FIELD	GWINVILLE	UNION CHURCH	MONTICELLO
WELL NAME	GWINVILLE GAS UNIT NO. 3	SARAH G. CUPIT NO. 1	SMITH ESTATE NO. 1
LOCATION	SEC. 21, T9N, R19W	SEC. 2, T8N, R4E	SEC. 3, T7N, R11E
OWNER	HUMBLE OIL & REFINING CO.	INEXCO OIL CO.	INEXCO OIL CO.
COMPLETED	02/24/71	05/--/78	07/--/78
SAMPLED	10/06/71	12/27/78	12/28/78
FORMATION	CRET-PALUXY	CRET-HOSSTON	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	11116	NOT GIVEN	15791
WELLHEAD PRESSURE,PSIG	3650	6200	5000
OPEN FLOW, MCFD	6600	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	95.9	91.3	91.3
ETHANE	0.3	2.5	1.0
PROPANE	0.1	0.8	0.2
N-BUTANE	TRACE	0.2	0.1
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	1.8	1.0	2.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	3.6	4.6
HELIUM	0.04	0.02	0.04
HEATING VALUE*	992	1018	967
SPECIFIC GRAVITY	0.584	0.626	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 121 SAMPLE 11520	INDEX 122 SAMPLE 13953	INDEX 123 SAMPLE 13815
STATE	MISSISSIPPI	NEW MEXICO	NEW MEXICO
COUNTY	RANKIN	EDDY	EDDY
FIELD	WILDCAT	JAMES RANCH	NOT GIVEN
WELL NAME	J. A. SPANN EST. NO. 1	JAMES RANCH NO. 3	MCMINN-STATE NO. 1
LOCATION	SEC. 19, T6N, R5E	SEC. 1, T23S, R30E	SEC. 18, T21S, R26E
OWNER	GENERAL CRUDE OIL CO.	BELCO PETROLEUM CO.	INEXCO OIL CO.
COMPLETED	DRILL STEM TEST NO. 5	12/08/72	08/01/72
SAMPLED	05/--/68	03/15/74	11/--/73
FORMATION	JURA-SMACKOVER	PENN-STRAWN	PENN-MORROW
GEOLOGIC PROVINCE CODE	210	430	430
DEPTH, FEET	NOT GIVEN	12731	10536
WELLHEAD PRESSURE,PSIG	NOT GIVEN	6287	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	18000	7300
COMPONENT, MOLE PCT			
METHANE	0.2	86.6	95.7
ETHANE	0.0	6.0	2.3
PROPANE	TRACE	2.2	0.5
N-BUTANE	0.0	1.0	0.1
ISOBUTANE	0.0	0.7	0.1
N-PENTANE	0.0	0.7	TRACE
ISOPENTANE	0.0	0.5	TRACE
CYCLOPENTANE	0.0	0.2	0.1
HEXANES PLUS	0.0	0.9	0.1
NITROGEN	1.1	0.7	0.3
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	98.5	0.4	0.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	2	1204	1039
SPECIFIC GRAVITY	1.519	0.668	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 124 SAMPLE 13816	INDEX 125 SAMPLE 13655	INDEX 126 SAMPLE 14498
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	LEA	LEA
FIELD	NOT GIVEN	ANTELOPE RIDGE	BELL LAKE
WELL NAME	MCMINN-STATE NO. 1	STATE 1 NO.1	BELL LAKE UNIT 4 NO. 15
LOCATION	SEC. 18, T21S, R26E	SEC. 2, T24S, R34E	SEC. 8, T23S, R34E
OWNER	INEXCO OIL CO.	TEXAS WEST OIL & GAS CORP.	CONTINENTAL OIL CO.
COMPLETED	08/01/72	03/12/73	03/06/75
SAMPLED	11/--/73	07/21/73	10/21/75
FORMATION	PENN-STRAWN	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9868	12288	13278
WELLHEAD PRESSURE,PSIG	NOT GIVEN	6600	NOT GIVEN
OPEN FLOW, MCFD	11700	21500	4700
COMPONENT, MOLE PCT			
METHANE	92.0	75.0	88.6
ETHANE	4.5	7.3	5.2
PROPANE	1.2	2.9	1.8
N-BUTANE	0.2	0.7	0.3
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.1	10.2	1.5
OXYGEN	0.0	2.2	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	1.9
HELIUM	0.03	0.01	0.02
HEATING VALUE*	1083	1042	1075
SPECIFIC GRAVITY	0.615	0.711	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 127 SAMPLE 15537	INDEX 128 SAMPLE 11697	INDEX 129 SAMPLE 13468
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	SAN JUAN	SAN JUAN
FIELD	QUERECHE PLAINS	NOT GIVEN	SAN JUAN
WELL NAME	FEDERAL "E" NO. 1	J. W. GODDARD NO. 3	HORTON NO. 3
LOCATION	SEC. 27, T18S, R32E	SEC. 11, T26N, R12W	SEC. 35, T32N, R11W
OWNER	MEWBOURNE OIL CO.	SKELLY OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	03/22/77	09/27/68	07/25/72
SAMPLED	12/10/78	12/06/68	11/06/72
FORMATION	PENN-MORROW	CRET-FRUITLAND	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	430	580	580
DEPTH, FEET	12620	1184	2861
WELLHEAD PRESSURE,PSIG	4004	374	964
OPEN FLOW, MCFD	2446	1814	2613
COMPONENT, MOLE PCT			
METHANE	86.7	96.0	87.1
ETHANE	7.3	0.4	7.2
PROPANE	3.1	0.1	3.0
N-BUTANE	0.7	0.0	0.7
ISOBUTANE	0.3	0.0	0.6
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.7	3.2	0.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	0.7
HELIUM	0.03	0.02	0.01
HEATING VALUE*	1145	983	1160
SPECIFIC GRAVITY	0.655	0.570	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 130 SAMPLE 9291	INDEX 131 SAMPLE 9321	INDEX 132 SAMPLE 9393
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO DOME	TOCITO DOME	TOCITO DOME
WELL NAME	NAVAJO "AL" NO. 1	NAVAJO AL NO. 1	NAVAJO "AL" TRIBAL NO. 2
LOCATION	SEC. 28, T26N, R18W	SEC. 28, T26N, R18W	SEC. 28, T26N, R18W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	NOT GIVEN	DRILL STEM TEST	NOT GIVEN
SAMPLED	04/12/64	04/29/64	06/12/64
FORMATION	PENN-PARADOX	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6215	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3325	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.1	0.9	69.8
ETHANE	10.8	0.0	11.7
PROPANE	6.6	0.2	6.3
N-BUTANE	4.5	0.0	2.9
ISOBUTANE	1.8	0.0	1.5
N-PENTANE	2.2	0.0	0.8
ISOPENTANE	TRACE	0.0	1.1
CYCLOPENTANE	0.5	0.0	0.4
HEXANES PLUS	2.2	0.0	1.3
NITROGEN	3.3	90.0	3.1
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	1.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	0.9
HELIUM	0.23	7.81	0.15
HEATING VALUE*	1483	15	1391
SPECIFIC GRAVITY	0.895	0.903	0.839

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 133 SAMPLE 10256	INDEX 134 SAMPLE 10534	INDEX 135 SAMPLE 12524
STATE	NEW YORK	NORTH DAKOTA	OHIO
COUNTY	CHENANGO	MCKENZIE	ASHTABULA
FIELD	SMITHFIELD FLATS	CLEAR CREEK	LENOX
WELL NAME	DECKER NO. 2	UNIT NO. 3	KANANEN-SUPPLEE NO. 1
LOCATION	WILBUR DECKER FARM	SEC. 23, T152N, R96W	LENOX TOWNSHIP
OWNER	GENEGANTSLET GAS & OIL CO.	SKELLY OIL CO.	UNION OIL CO. OF CALIFORNIA
COMPLETED	01/01/64	10/15/65	09/09/70
SAMPLED	10/28/65	04/19/66	11/05/70
FORMATION	SILU-DECKER	PENN-MINNELUSA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	395	160
DEPTH, FEET	2020	7184	3304
WELLHEAD PRESSURE,PSIG	565	2650	1220
OPEN FLOW, MCFD	2500	45000	2806
COMPONENT, MOLE PCT			
METHANE	97.3	0.5	89.5
ETHANE	1.8	0.1	4.4
PROPANE	0.2	0.2	1.4
N-BUTANE	0.0	0.0	0.4
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.5	96.0	3.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	3.0	0.0
HELIUM	0.06	0.06	0.12
HEATING VALUE*	1024	12	1055
SPECIFIC GRAVITY	0.565	0.982	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 136 SAMPLE 13635	INDEX 137 SAMPLE 13636	INDEX 138 SAMPLE 14854
STATE	OHIO	OHIO	OHIO
COUNTY	GEAUGA	GEAUGA	MAHONING
FIELD	AUBURN	AUBURN	LIMA N
WELL NAME	TIMMONS NO. 1	ORAVEC NO. 1	RICHARD CALVIN NO. 1
LOCATION	LOT 2, SEC. 3, AUBURN TWP.	LOT 38, NEWBURY TWP.	SEC. 9, BEAVER TOWNSHIP
OWNER	QUAKER STATE OIL REF. CORP.	QUAKER STATE OIL REF. CORP.	POMINEX, INC.
COMPLETED	12/30/71	01/26/72	06/20/75
SAMPLED	07/--/73	07/--/73	11/03/76
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3723	3775	5510
WELLHEAD PRESSURE,PSIG	1500	1575	1375
OPEN FLOW, MCFD	600	3072	1400
COMPONENT, MOLE PCT			
METHANE	86.5	88.9	94.2
ETHANE	5.6	4.9	2.4
PROPANE	2.5	1.8	0.3
N-BUTANE	0.7	0.4	TRACE
ISOBUTANE	0.5	0.4	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	3.5	3.0	2.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.13	0.12	0.08
HEATING VALUE*	1108	1076	1008
SPECIFIC GRAVITY	0.652	0.626	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 139 SAMPLE 14243	INDEX 140 SAMPLE 14704	INDEX 141 SAMPLE 14705
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	LAMBERT NW	LAMBERT SE	LAMBERT SE
WELL NAME	WEBB NO. 9-B	RUTH NO. 1	SCHNITZER
LOCATION	SEC. 9, T26N, R12W	SEC. 15, T25N, R10W	SEC. 21, T25N, R10W
OWNER	RAN RICKS, JR.	L. R. FRENCH JR.	L. R. FRENCH JR.
COMPLETED	NOT GIVEN	11/02/75	NOT GIVEN
SAMPLED	12/--/74	06/15/76	06/15/76
FORMATION	NOT GIVEN	PENN-OSWEGO	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5388	5483
WELLHEAD PRESSURE,PSIG	NOT GIVEN	750	950
OPEN FLOW, MCFD	NOT GIVEN	600	600
COMPONENT, MOLE PCT			
METHANE	88.9	87.2	86.2
ETHANE	5.5	5.3	5.7
PROPANE	2.6	2.8	3.2
N-BUTANE	0.8	0.8	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.9	2.3	2.4
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	0.08	0.09
HEATING VALUE*	1146	1131	1146
SPECIFIC GRAVITY	0.649	0.656	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 142 SAMPLE 11005	INDEX 143 SAMPLE 12876	INDEX 144 SAMPLE 13576
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	BEAVER	BECKHAM
FIELD	RINGWOOD	CAMRICK DISTRICT	ERICK
WELL NAME	PECHA NO. 1	BRANSGROVE NO. 2	POWELL NO 1-11
LOCATION	SEC. 9, T23N, R9W	SEC. 33, T1N, R20ECM	SEC. 11, T9N, R25W
OWNER	ALADDIN PETROLEUM CORP.	ATLANTIC RICHFIELD CO.	MCCULLOCH OIL CORP.
COMPLETED	01/02/67	NOT GIVEN	11/15/72
SAMPLED	06/21/67	06/23/71	04/10/73
FORMATION	MISS-	NOT GIVEN	PERM-GRANITEWASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6515	NOT GIVEN	7000
WELLHEAD PRESSURE,PSIG	1350	NOT GIVEN	1925
OPEN FLOW, MCFD	14174	NOT GIVEN	30
COMPONENT, MOLE PCT			
METHANE	87.0	88.5	94.0
ETHANE	6.4	4.7	2.7
PROPANE	2.1	3.1	1.1
N-BUTANE	0.7	1.0	0.3
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.8	1.3	1.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.57	0.10	0.04
HEATING VALUE*	1125	1144	1060
SPECIFIC GRAVITY	0.648	0.652	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 145 SAMPLE 8351	INDEX 146 SAMPLE 15004	INDEX 147 SAMPLE 15792
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SQUAW CREEK	SQUAW CREEK	SQUAW CREEK
WELL NAME	A. O. BAKER NO. 1	TURTLE SITTING DOWN NO. 1	COWAN NO. 1-2
LOCATION	SEC. 36, T14N, R13W	SEC. 27, T14N, R13W	SEC. 2, T14N, R13W
OWNER	SUN OIL CO.	HARPER OIL CO.	MUSTANG PRODUCTION CO.
COMPLETED	09/16/59	11/06/76	NOT GIVEN
SAMPLED	12/27/61	05/17/77	09/27/79
FORMATION	PENN-CHEROKEE	PENN-SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10777	11796	10323
WELLHEAD PRESSURE,PSIG	5400	4400	2000
OPEN FLOW, MCFD	19784	1550	2995
COMPONENT, MOLE PCT			
METHANE	80.7	87.6	93.9
ETHANE	7.9	6.3	3.3
PROPANE	3.0	2.9	0.8
N-BUTANE	0.4	0.8	0.2
ISOBUTANE	0.4	0.6	0.1
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	5.5	0.3	0.6
OXYGEN	1.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.7
HELIUM	0.05	0.02	0.02
HEATING VALUE*	1077	1150	1055
SPECIFIC GRAVITY	0.677	0.655	0.599

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 148 SAMPLE 8262	INDEX 149 SAMPLE 11650	INDEX 150 SAMPLE 15116
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	CADDO
FIELD	WATONGA NE	WATONGA NW	COGAR N
WELL NAME	C. W. SWANEGAN NO. 1	MARTIN NO. 1	TAPPER NO. 1
LOCATION	SEC. 11, T16N, R11W	SEC. 8, T16N, R13W	SEC. 1, T10N, R10W
OWNER	TEXACO INC.	AMOCO PRODUCTION CO.	WOODS PETROLEUM CORP.
COMPLETED	08/30/61	01/04/68	05/15/76
SAMPLED	11/01/61	09/16/68	09/--/77
FORMATION	PENN-CHEROKEE & ATOKA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9022	9738	12374
WELLHEAD PRESSURE,PSIG	6500	1989	7650
OPEN FLOW, MCFD	NOT GIVEN	2875	2480
COMPONENT, MOLE PCT			
METHANE	93.3	85.7	86.9
ETHANE	3.6	7.3	3.4
PROPANE	1.2	3.9	1.7
N-BUTANE	0.2	1.0	0.7
ISOBUTANE	0.1	0.4	0.4
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.2	0.6
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.2	0.5
NITROGEN	0.9	0.6	3.9
OXYGEN	0.1	0.0	0.9
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.7
HELIUM	0.03	0.04	0.02
HEATING VALUE*	1064	1178	1090
SPECIFIC GRAVITY	0.602	0.672	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 151 SAMPLE 10657	INDEX 152 SAMPLE 13658	INDEX 153 SAMPLE 14812
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	COAL
FIELD	KEYES GAS AREA	MIDWELL	ASHLAND S
WELL NAME	FERGUSON UNIT NO. 1	DENNING NO. 1	GOODMAN NO. 1
LOCATION	SEC. 2, T4N, R9ECM	SEC. 24, T4N, R9ECM	SEC. 1, T3N, R11E
OWNER	AMOCO PRODUCTION CO.	AN-SON CORP.	NFC PETROLEUM CORP.
COMPLETED	03/09/54	02/09/73	06/17/76
SAMPLED	07/20/66	07/25/73	10/--/76
FORMATION	PENN-KEYES	PENN-MORROW	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	435	435	345
DEPTH, FEET	4590	4560	3347
WELLHEAD PRESSURE,PSIG	834	750	486
OPEN FLOW, MCFD	55415	3000	4881
COMPONENT, MOLE PCT			
METHANE	62.3	60.1	91.3
ETHANE	3.1	4.0	3.3
PROPANE	2.0	2.3	1.7
N-BUTANE	0.7	0.6	0.4
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	27.2	30.7	2.1
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	0.5
HELIUM	2.22	1.21	0.13
HEATING VALUE*	807	792	1062
SPECIFIC GRAVITY	0.740	0.744	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 154 SAMPLE 14281	INDEX 155 SAMPLE 15305	INDEX 156 SAMPLE 15800
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	CUSTER	CUSTER
FIELD	FT. SILL	ANTHON	ARAPAHO
WELL NAME	RYAN NO. 1	HOELKER NO. 1	COULSON NO. 1
LOCATION	SEC. 23, T3N, R10W	SEC. 33, T15N, R17W	SEC. 28, T13N, R17W
OWNER	SHEBESTER, INC.	FERGUSON OIL CO.	HARPER OIL CO.
COMPLETED	11/30/73	09/19/77	NOT GIVEN
SAMPLED	02/28/75	06/22/78	10/02/79
FORMATION	PERM-RYAN	DEVO-HUNTON	PENN-MORROW
GEOLOGIC PROVINCE CODE	350	360	360
DEPTH, FEET	1395	15708	15740
WELLHEAD PRESSURE,PSIG	535	4200	9800
OPEN FLOW, MCFD	2340	8630	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.9	92.2	96.9
ETHANE	3.6	0.2	0.7
PROPANE	1.7	TRACE	0.1
N-BUTANE	0.4	0.0	TRACE
ISOBUTANE	0.3	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	2.8	2.1	0.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	5.3	1.9
HELIUM	0.10	0.03	0.02
HEATING VALUE*	1062	938	1002
SPECIFIC GRAVITY	0.615	0.616	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 157 SAMPLE 11431	INDEX 158 SAMPLE 14979	INDEX 159 SAMPLE 11255
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	DEWEY
FIELD	CRANE SE	THOMAS S	NOBSCOT NW
WELL NAME	CRANE STAR NO. 1	BOYD MILLER NO. 1	CROSS UNIT NO. 1
LOCATION	SEC. 17, T15N, R14W	SEC. 10, T14N, R14W	SEC. 25, T17N, R16W
OWNER	EASON OIL CO.	DAVIS OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	04/05/66	NOT GIVEN	10/01/67
SAMPLED	04/05/68	04/24/77	01/10/68
FORMATION	PENN-MORROW & MISS-CHESTER	PENN-RED FORK	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1100	NOT GIVEN	10244
WELLHEAD PRESSURE,PSIG	4500	4982	4250
OPEN FLOW, MCFD	NOT GIVEN	4350	9245
COMPONENT, MOLE PCT			
METHANE	94.6	83.0	91.9
ETHANE	3.0	9.3	3.6
PROPANE	0.7	4.4	1.1
N-BUTANE	0.2	0.9	0.3
ISOBUTANE	TRACE	0.5	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.3	0.9	1.3
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.6
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1051	1191	1068
SPECIFIC GRAVITY	0.594	0.685	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 160 SAMPLE 10848	INDEX 161 SAMPLE 10433	INDEX 162 SAMPLE 11759
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	GARFIELD	GARFIELD
FIELD	BISHOP	SOONER TREND	SOONER TREND
WELL NAME	ARCHIE B NO. 1	SAWYER NO. 1	EGGERS-BARBEE NO. 1
LOCATION	SEC. 18, T17N, R25W	SEC. 1, T21N, R7W	SEC. 4, T21N, R5W
OWNER	PHILLIPS PETROLEUM CO.	SKELLY OIL CO.	VIERSEN & COCHRAN
COMPLETED	05/11/64	NOT GIVEN	NOT GIVEN
SAMPLED	01/23/67	03/07/66	02/07/69
FORMATION	PENN-TONKAWA	MISS-MORMIO	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7811	6770	6150
WELLHEAD PRESSURE,PSIG	2217	1200	2000
OPEN FLOW, MCFD	19750	850	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.7	84.5	55.5
ETHANE	8.0	7.7	18.3
PROPANE	4.4	3.2	14.4
N-BUTANE	1.1	1.1	5.0
ISOBUTANE	0.6	0.5	2.8
N-PENTANE	0.2	0.2	1.4
ISOPENTANE	0.3	0.3	0.6
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	2.0	1.4	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.6
HELIUM	0.12	0.10	TRACE
HEATING VALUE*	1184	1166	1659
SPECIFIC GRAVITY	0.690	0.677	0.976

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 163 SAMPLE 12176	INDEX 164 SAMPLE 11630	INDEX 165 SAMPLE 11325
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	HARPER
FIELD	CHICKASHA NW	RUSH SPRINGS SW	BUFFALO N
WELL NAME	DIETRICH NO. 1	RUSH SPRINGS UNIT NO. 1	ROBERT R. ROHRER NO. 1
LOCATION	SEC. 13, T7N, R8W	SEC. 8, T3N, R7W	SEC. 6, T28N, R22W
OWNER	PHILLIPS PETROLEUM CO.	CHEVRON OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	01/11/70	12/01/67	08/24/59
SAMPLED	01/26/70	08/20/68	03/01/68
FORMATION	PENN-SPRINGER-CUNNINGHAM	PENN-SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14393	16877	7220
WELLHEAD PRESSURE,PSIG	8120	10494	1406
OPEN FLOW, MCFD	28000	6050	4053
COMPONENT, MOLE PCT			
METHANE	91.8	83.8	91.8
ETHANE	4.3	2.1	3.7
PROPANE	1.7	0.3	1.6
N-BUTANE	0.3	0.2	0.5
ISOBUTANE	0.1	0.0	0.2
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	0.8	9.8	0.9
OXYGEN	TRACE	2.4	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.2
HELIUM	0.03	0.02	0.09
HEATING VALUE*	1074	923	1102
SPECIFIC GRAVITY	0.610	0.642	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 166 SAMPLE 11277	INDEX 167 SAMPLE 14247	INDEX 168 SAMPLE 14382
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HASKELL
FIELD	BUFFALO S	FORT SUPPLY NE	STIGLER
WELL NAME	ERPLE PROPHET NO. 1	DEWEESE NO. 1	MCCARROLL NO. 1
LOCATION	SEC. 35, T27N, R23W	SEC. 22, T25N, R21W	SEC. 10, T9N, R21E
OWNER	SOUTHLAND ROYALTY CO.	DYCO PETROLEUM CORP.	SOUTHERN UNION PRODUCTION CO
COMPLETED	NOT GIVEN	10/10/74	02/01/74
SAMPLED	02/13/68	12/30/74	06/11/75
FORMATION	PENN-TONKAWA	MISS-CHESTER	PENN-SPIRO
GEOLOGIC PROVINCE CODE	360	360	345
DEPTH, FEET	NOT GIVEN	6946	4011
WELLHEAD PRESSURE,PSIG	1490	1436	1550
OPEN FLOW, MCFD	NOT GIVEN	8250	2200
COMPONENT, MOLE PCT			
METHANE	76.4	91.3	96.5
ETHANE	7.4	3.9	1.1
PROPANE	2.8	1.7	0.1
N-BUTANE	1.0	0.4	0.0
ISOBUTANE	0.3	0.3	0.0
N-PENTANE	0.4	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	9.0	1.2	1.6
OXYGEN	1.6	TRACE	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.5
HELIUM	0.16	0.10	0.09
HEATING VALUE*	1068	1080	1000
SPECIFIC GRAVITY	0.708	0.618	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 169 SAMPLE 13977	INDEX 170 SAMPLE 11546	INDEX 171 SAMPLE 13743
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	KAY	KINGFISHER
FIELD	WILDCAT	CHILOCCO E	LYONS SW
WELL NAME	WILBANKS NO. 1	WIDENER NO. 2	FLORENE NO. 4
LOCATION	SEC. 29, T5N, R11E	SEC. 20, T29N, R3E	SEC. 5, T19N, R9W
OWNER	WOODS PETROLEUM CO.	FELL & WOLFE OIL CO.	HARPER OIL CO.
COMPLETED	04/11/74	NOT GIVEN	08/27/73
SAMPLED	04/15/74	06/20/68	10/05/73
FORMATION	PENN-THURMAN-BOGGY	PENN-BARTLESVILLE	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	355	355	360
DEPTH, FEET	1511	3200	NOT GIVEN
WELLHEAD PRESSURE,PSIG	650	190	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.6	73.8	84.2
ETHANE	2.2	7.8	7.6
PROPANE	0.2	3.4	4.1
N-BUTANE	TRACE	1.2	1.2
ISOBUTANE	0.1	0.4	0.7
N-PENTANE	0.0	0.6	0.3
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	TRACE	0.7	0.2
NITROGEN	4.6	11.2	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.17	0.37	0.07
HEATING VALUE*	990	1103	1199
SPECIFIC GRAVITY	0.589	0.734	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 172 SAMPLE 10719	INDEX 173 SAMPLE 10882	INDEX 174 SAMPLE 14713
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LOGAN
FIELD	KINTA	KINTA	PRAIRIE BELL
WELL NAME	WHITE B NO. 1	WHITE F NO. 1A	VAUGHTER NO. 1
LOCATION	SEC. 3, T6N, R18E	SEC. 13, T6N, R18E	SEC. 31, T15N, R3W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	FERGUSON OIL CO.
COMPLETED	06/11/66	09/14/66	01/06/76
SAMPLED	09/09/66	02/18/67	06/27/76
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-LAYTON
GEOLOGIC PROVINCE CODE	345	345	355
DEPTH, FEET	4999	7299	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1882	2530	1700
OPEN FLOW, MCFD	23302	25776	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.1	96.2	81.7
ETHANE	2.2	1.6	8.9
PROPANE	0.8	0.3	3.8
N-BUTANE	0.3	0.0	1.2
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.4
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	9.2	0.6	2.7
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.3	0.0
HELIUM	0.07	0.04	0.06
HEATING VALUE*	954	1011	1196
SPECIFIC GRAVITY	0.620	0.582	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 175 SAMPLE 14712	INDEX 176 SAMPLE 13952	INDEX 177 SAMPLE 10420
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	PITTSBURG
FIELD	CAMPBELL	CHEYENNE VALLEY	KINTA
WELL NAME	HOUMA NO. 1	SUTTER NO. 1	WILLIAM FLOYD NO. 1
LOCATION	SEC. 14, T23N, R16W	SEC. 27, T22N, R13W	SEC. 28, T7N, R18E
OWNER	L. R. FRENCH JR.	L.R. FRENCH, JR.	SKELLY OIL COMPANY
COMPLETED	10/07/75	06/13/73	02/28/66
SAMPLED	06/28/76	03/13/74	02/28/66
FORMATION	MISS-	DEVO-HUNTON	MISS-RED OAK
GEOLOGIC PROVINCE CODE	360	360	345
DEPTH, FEET	7113	8100	7825
WELLHEAD PRESSURE,PSIG	1526	3100	2484
OPEN FLOW, MCFD	1168	80000	5374
COMPONENT, MOLE PCT			
METHANE	92.3	61.3	96.3
ETHANE	2.6	16.4	1.6
PROPANE	0.9	11.4	0.6
N-BUTANE	0.4	5.1	0.0
ISOBUTANE	0.1	1.7	0.0
N-PENTANE	0.2	1.6	0.0
ISOPENTANE	0.1	1.0	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	0.1	0.7	0.0
NITROGEN	2.5	0.4	0.4
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	1.1
HELIUM	0.05	TRACE	0.05
HEATING VALUE*	1040	1595	1020
SPECIFIC GRAVITY	0.606	0.928	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 178 SAMPLE 11257	INDEX 179 SAMPLE 11260	INDEX 180 SAMPLE 11320
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	KINTA	MCALISTER	MCALISTER S
WELL NAME	WHITE P NO. 1	W. H. STANTON NO. 1	CORONADO A NO. 1
LOCATION	SEC. 30, T7N, R18E	SEC. 22, T5N, R14E	SEC. 29, T3N, R13E
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	11/13/67	11/14/67	12/05/67
SAMPLED	--/--/33	01/25/68	02/29/68
FORMATION	PENN-ATOKA	PENN-HARTSHORNE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6402	4395	8390
WELLHEAD PRESSURE,PSIG	2394	677	3630
OPEN FLOW, MCFD	14869	1133	6635
COMPONENT, MOLE PCT			
METHANE	88.3	90.2	90.4
ETHANE	1.6	5.8	3.1
PROPANE	0.3	1.7	0.2
N-BUTANE	0.0	0.6	0.3
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	1.0
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	6.9	1.0	2.3
OXYGEN	1.7	0.0	0.4
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.5	1.0
HELIUM	0.02	0.05	0.04
HEATING VALUE*	931	1082	1080
SPECIFIC GRAVITY	0.615	0.619	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 181 SAMPLE 14540	INDEX 182 SAMPLE 14541	INDEX 183 SAMPLE 10295
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	STEPHENS
FIELD	REAMS SE	REAMS SE	SHO-VEL-TUM
WELL NAME	LAKE NO. 1-32	LAKE NO. 1-32	CROSBIE MUDGE UNIT NO. 4
LOCATION	SEC. 32, T7N, R16E	SEC. 32, T7N, R16E	SEC. 23, T1S, R5W
OWNER	SNEE & EBERLY	SNEE & EBERLY	SKELLY OIL CO.
COMPLETED	06/28/75	06/28/75	08/23/65
SAMPLED	12/03/75	12/03/75	11/29/65
FORMATION	PENN-HARTSHORNE	PENN-BOOCH	MISS-SYCAMORE
GEOLOGIC PROVINCE CODE	345	345	350
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3924
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1582
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	91.0	91.0	87.4
ETHANE	5.5	5.4	6.3
PROPANE	1.6	1.6	2.3
N-BUTANE	0.2	0.3	0.8
ISOBUTANE	0.2	0.2	TRACE
N-PENTANE	TRACE	TRACE	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.7	0.6	1.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	1.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1080	1086	1120
SPECIFIC GRAVITY	0.615	0.618	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 184 SAMPLE 11432	INDEX 185 SAMPLE 7711	INDEX 186 SAMPLE 12858
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	TEXAS	TEXAS
FIELD	STAGE STAND SE	CARTHAGE GAS AREA	HUGOTON, OKLAHOMA
WELL NAME	S. J. PINSON NO. 1	ROOFNER NO. A-1	STONEBRAKER Y
LOCATION	SEC. 30, T1N, R7W	SEC. 29, T6N, R11ECM	SEC. 9, T2N, R12ECM
OWNER	EASON OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	07/26/60	NOT GIVEN
SAMPLED	04/05/68	10/17/60	06/23/71
FORMATION	PENN-DEESE	PENN-TOPEKA	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	350	360	360
DEPTH, FEET	NOT GIVEN	3018	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	414	185
OPEN FLOW, MCFD	NOT GIVEN	11000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.5	63.0	71.8
ETHANE	4.9	6.0	5.8
PROPANE	2.8	3.3	4.4
N-BUTANE	0.9	1.0	1.0
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.5	23.7	15.4
OXYGEN	0.0	0.9	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.05	0.70	0.49
HEATING VALUE*	1123	904	1014
SPECIFIC GRAVITY	0.652	0.752	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 187 SAMPLE 12859	INDEX 188 SAMPLE 12975	INDEX 189 SAMPLE 15171
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HUGOTON, OKLAHOMA	HUGOTON, OKLAHOMA	UNALLOCATED
WELL NAME	STONEBRAKER AA-1	C. M. REYNOLDS NO. 1	ADDINGTON NO. 1
LOCATION	SEC. 10, T2N, R12ECM	SEC. 31, T1N, R11ECM	SEC. 6, T4N, R11ECM
OWNER	CITIES SERVICE OIL CO.	SKELLY OIL CO.	KENNEDY & MITCHELL, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	11/22/76
SAMPLED	06/23/71	08/27/71	12/20/77
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3837
WELLHEAD PRESSURE,PSIG	155	NOT GIVEN	515
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2237
COMPONENT, MOLE PCT			
METHANE	70.2	64.5	76.1
ETHANE	5.6	5.1	7.7
PROPANE	3.7	3.8	4.0
N-BUTANE	1.0	1.0	1.2
ISOBUTANE	0.5	0.5	0.2
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	TRACE	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	18.0	23.3	9.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.56	1.19	0.27
HEATING VALUE*	972	916	1095
SPECIFIC GRAVITY	0.721	0.743	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 190 SAMPLE 14523	INDEX 191 SAMPLE 14524	INDEX 192 SAMPLE 13358
STATE	OKLAHOMA	OKLAHOMA	PENNSYLVANIA
COUNTY	WOODS	WOODS	ARMSTRONG
FIELD	DACOMA NE	DACOMA NW	ROARING RUN
WELL NAME	SCHICK NO. 25A	WHITE NO. 3A	CANTERBURY COAL NO. RR-1
LOCATION	SEC. 25, T26N, R13W	SEC. 3, T25N, R13W	SEC. D, ELDERS RIDGE QUAD
OWNER	RAN RICKS, JR.	RAN RICKS, JR.	PENNZOIL UNITED, INC.
COMPLETED	NOT GIVEN	NOT GIVEN	12/14/70
SAMPLED	10/99/75	10/99/75	08/16/72
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	360	360	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7194
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3980
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2170
COMPONENT, MOLE PCT			
METHANE	89.2	89.4	96.2
ETHANE	5.4	5.3	3.0
PROPANE	2.4	2.4	0.2
N-BUTANE	0.8	0.7	0.0
ISOBUTANE	0.4	0.4	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.0	1.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.04	0.04	0.02
HEATING VALUE*	1125	1118	1033
SPECIFIC GRAVITY	0.638	0.637	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 193 SAMPLE 13359	INDEX 194 SAMPLE 15816	INDEX 195 SAMPLE 11030
STATE	PENNSYLVANIA	PENNSYLVANIA	TEXAS
COUNTY	ARMSTRONG	SOMERSET	ANDERSON
FIELD	ROARING RUN	SOMERSET W	LONG LAKE
WELL NAME	ASCS UNIT 25200540 NO. 1	S. G. ENGLEKA JR. NO. 1	LONG LAKE PR GAS UNIT NO. 1
LOCATION	SEC. A, KISKIMINITAS QUAD	MURDOCK QUADRANGLE	SIMON SANCHEZ SUR. A-60
OWNER	PENNZOIL UNITED, INC.	AMOCO PRODUCTION CO.	HUNT OIL CO.
COMPLETED	09/11/71	11/21/77	11/30/66
SAMPLED	08/16/72	10/--/79	07/15/67
FORMATION	DEVO-CHERT&ORISKANY	DEVO-ORISKANY	CRET-PETTIT
GEOLOGIC PROVINCE CODE	160	160	260
DEPTH, FEET	7300	9086	9765
WELLHEAD PRESSURE,PSIG	3950	1000	4440
OPEN FLOW, MCFD	2600	500	9000
COMPONENT, MOLE PCT			
METHANE	95.3	98.0	94.7
ETHANE	2.8	1.1	1.0
PROPANE	0.2	0.1	0.1
N-BUTANE	TRACE	0.0	0.1
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	1.4	0.6	2.3
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.4
HELIUM	0.02	0.04	0.02
HEATING VALUE*	1021	1015	988
SPECIFIC GRAVITY	0.578	0.565	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 196 SAMPLE 12753	INDEX 197 SAMPLE 15144	INDEX 198 SAMPLE 12335
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	BRAZORIA	BRAZORIA
FIELD	FUHRMAN-MASCHO	ALVIN CITY	HASTINGS W
WELL NAME	J. W. BONER B NO. 10	M.C. BAIRD NO. 1	EMIL GROTE NO. 14
LOCATION	SEC. 25, BLK. A-43, PSL SUR.	HT&BRR SUR. A-228	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	CROWN CENTRAL PETROLEUM	AMOCO PETROLEUM CORP.
COMPLETED	05/10/44	06/17/76	07/13/70
SAMPLED	04/05/71	11/11/77	07/21/70
FORMATION	PERM-GRAYBURG	OLIG-FRIO	MIOC-HASTINGS
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	4130	9995	3690
WELLHEAD PRESSURE,PSIG	50	2475	1512
OPEN FLOW, MCFD	NOT GIVEN	6800	16500
COMPONENT, MOLE PCT			
METHANE	12.4	95.5	97.3
ETHANE	1.8	2.4	0.4
PROPANE	0.7	0.7	0.1
N-BUTANE	0.2	0.2	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	84.0	0.1	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	1.8
HELIUM	0.05	TRACE	0.01
HEATING VALUE*	205	1056	995
SPECIFIC GRAVITY	0.931	0.592	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 199 SAMPLE 12175	INDEX 200 SAMPLE 12513	INDEX 201 SAMPLE 10702
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	CALHOUN	CAMERON
FIELD	BOEDECKER W	POWDERHORN	SAN MARTIN
WELL NAME	ED RACHAL FOUNDATION NO. 1	STATE OF TEXAS NO. 15-C	GATEWOOD NEWBERRY NO. 1-L
LOCATION	JOSE NAVAZ SUR. 660, A-420	STATE OF TEXAS TRACT NO. 49	SAN MARTIN GRANT
OWNER	FOREST OIL CORP.	DOW CHEMICAL CO.	SKELLY OIL CO.
COMPLETED	09/01/69	05/16/69	03/03/65
SAMPLED	07/--/70	10/21/70	08/26/66
FORMATION	OLIG-FRIO	MIOC-2-A SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7566	4815	9385
WELLHEAD PRESSURE,PSIG	2722	1050	4634
OPEN FLOW, MCFD	4600	14800	8600
COMPONENT, MOLE PCT			
METHANE	92.8	95.2	95.9
ETHANE	3.5	3.0	1.9
PROPANE	1.2	0.1	0.4
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.5	1.2	1.6
OXYGEN	0.2	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1058	1021	1016
SPECIFIC GRAVITY	0.601	0.576	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 202 SAMPLE 10747	INDEX 203 SAMPLE 14589	INDEX 204 SAMPLE 13764
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CAMERON	CAMERON	CARSON
FIELD	SAN MARTIN	VISTA DEL MAR	BOBBITT AREA
WELL NAME	GATEWOOD NEWBERRY NO. 1	BROWNSVILLE N.D. NO. 1	LOOTEN NO. 1
LOCATION	H. M. SKELTON SUR. A-269	SAN MARTIN GRANT, A-6	SEC. 86, BLK.2, TTRR SUR.
OWNER	SKELLY OIL CO.	ATLANTIC RICHFIELD CO.	HUNTER OIL CORP.
COMPLETED	03/03/65	12/01/73	10/23/73
SAMPLED	10/13/66	02/20/76	10/23/73
FORMATION	MIOC-	MIOC-	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	220	220	440
DEPTH, FEET	8943	7212	3342
WELLHEAD PRESSURE,PSIG	3657	1200	487
OPEN FLOW, MCFD	19500	11300	100
COMPONENT, MOLE PCT			
METHANE	96.0	96.1	55.3
ETHANE	1.7	1.8	1.9
PROPANE	0.3	0.3	0.5
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.5	1.5	32.6
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	7.9
HELIUM	0.01	0.01	1.67
HEATING VALUE*	1011	1014	607
SPECIFIC GRAVITY	0.576	0.574	0.774

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 205 SAMPLE 13779	INDEX 206 SAMPLE 10072	INDEX 207 SAMPLE 11947
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CHAMBERS	CLAY
FIELD	BOBBITT AREA	OYSTER BAYOU	DILLARD SW
WELL NAME	LOOTEN NO. 1	FELIX JACKSON NO. 51	HARVILL NO. 1
LOCATION	SEC. 86, BLK.2, TTRR SUR.	ANASTACIO YBARBO A-30	SEC. 76, WOOD CSL SUR. A705
OWNER	HUNTER OIL CORP.	SUN OIL CO.	LONGHORN PRODUCTION CO.
COMPLETED	10/23/73	02/02/64	06/24/68
SAMPLED	10/25/73	08/19/65	07/03/67
FORMATION	PERM-WICHITA-ALBANY	OLIG-HACKBERRY A	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	440	220	420
DEPTH, FEET	3304	9264	5782
WELLHEAD PRESSURE,PSIG	475	4940	800
OPEN FLOW, MCFD	250	100	1200
COMPONENT, MOLE PCT			
METHANE	59.1	93.8	67.4
ETHANE	2.0	3.2	12.8
PROPANE	0.5	0.9	9.6
N-BUTANE	0.0	0.3	2.5
ISOBUTANE	0.0	0.2	1.0
N-PENTANE	0.0	0.1	0.6
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	0.0	TRACE	0.2
HEXANES PLUS	0.0	0.1	0.5
NITROGEN	33.9	0.8	4.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.3	0.1
HELIUM	1.74	0.25	0.09
HEATING VALUE*	647	1061	1355
SPECIFIC GRAVITY	0.728	0.599	0.823

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 208 SAMPLE 11669	INDEX 209 SAMPLE 14195	INDEX 210 SAMPLE 15000
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	COLUMBUS	GLIDDEN	KAINER
WELL NAME	UNIT NO. 10-14	J. T. JOHNSON NO.1	KAINER & JOHNSON NO. 1
LOCATION	J. TUMLINSON SUR. A-46	DANIEL GILLELAND SUR. A-26	B. RATCLIFF SUR. A-894
OWNER	CITIES SERVICE OIL CO.	SUPERIOR OIL CO.	PETRO LEWIS CORP.
COMPLETED	03/07/68	04/23/73	01/31/74
SAMPLED	10/14/68	10/25/74	05/10/77
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7252	10297	6165
WELLHEAD PRESSURE,PSIG	3175	4680	2310
OPEN FLOW, MCFD	64000	12950	6600
COMPONENT, MOLE PCT			
METHANE	82.6	87.8	88.7
ETHANE	4.9	4.6	6.0
PROPANE	2.8	2.2	2.4
N-BUTANE	0.7	0.5	0.6
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	5.2	0.2	0.5
OXYGEN	1.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	3.1	0.4
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1077	1106	1141
SPECIFIC GRAVITY	0.683	0.665	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 211 SAMPLE 8881	INDEX 212 SAMPLE 14667	INDEX 213 SAMPLE 12770
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	COTTLE	CROCKETT
FIELD	NOT GIVEN	PROVIDENCE	OZONA
WELL NAME	CARTER NO. A-1	B. J. BROWNING NO. 1	VADA BEAN NO. 1
LOCATION	SUR. 276, A279	SEC. 2, P.B. BROTHERS SUR.	10 MI. SW OF OZONA
OWNER	SUNRAY D-X OIL CO.	JACK GRIMM	ATLANTIC RICHFIELD CO.
COMPLETED	NOT GIVEN	NOT GIVEN	--/--/65
SAMPLED	02/27/63	05/06/76	04/20/71
FORMATION	NOT GIVEN	NOT GIVEN	PENN-CANYON
GEOLOGIC PROVINCE CODE	410	435	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6229
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1075
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	244
COMPONENT, MOLE PCT			
METHANE	66.3	80.7	78.8
ETHANE	11.1	10.2	11.1
PROPANE	7.9	4.4	5.6
N-BUTANE	3.1	1.0	1.2
ISOBUTANE	1.2	0.6	0.6
N-PENTANE	0.7	0.1	0.3
ISOPENTANE	0.6	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	7.1	2.2	1.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.2	0.4
HELIUM	0.30	0.09	0.04
HEATING VALUE*	1306	1191	1230
SPECIFIC GRAVITY	0.833	0.693	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 214 SAMPLE 12772	INDEX 215 SAMPLE 12775	INDEX 216 SAMPLE 13610
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	DE WITT
FIELD	OZONA	OZONA	BALFOUR
WELL NAME	J. R. BAILEY NO. 1	ADDIE CLAYTON NO. 1	MUSSELMAN CATTLE CO. NO. 1
LOCATION	20 MI. NE OF OZONA	20 MI. NE OF OZONA	A.J.HOUSE SUR. A-743
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	B.D.K. PRODUCTION CO.
COMPLETED	--/--/66	--/--/66	11/08/70
SAMPLED	04/20/71	04/20/71	05/24/73
FORMATION	PENN-CANYON	PENN-CANYON	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	430	430	220
DEPTH, FEET	7698	7455	5392
WELLHEAD PRESSURE,PSIG	150	150	1325
OPEN FLOW, MCFD	25	495	2477
COMPONENT, MOLE PCT			
METHANE	71.9	78.0	88.5
ETHANE	14.5	10.8	5.5
PROPANE	6.8	5.3	3.0
N-BUTANE	2.2	0.9	0.7
ISOBUTANE	1.0	0.9	0.7
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	TRACE	0.3	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.3	2.7	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.3
HELIUM	0.04	0.07	0.01
HEATING VALUE*	1304	1218	1146
SPECIFIC GRAVITY	0.774	0.722	0.651

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 217 SAMPLE 13611	INDEX 218 SAMPLE 12156	INDEX 219 SAMPLE 14258
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DEWITT
FIELD	BALFOUR	YORKTOWN S	FRIAR RANCH W
WELL NAME	MUSSELMAN CATTLE CO. NO. 1	OSCAR D. JOCHEN NO. 1	STILES CATTLE CO. NO. 1
LOCATION	A.J.HOUSE SUR. A-743	G. H. WOOD SUR. 45, A482	JOHN DALEY SUR., A-11
OWNER	B.D.K. PRODUCTION CO.	QUINTANA PETROLEUM CORP.	COASTAL STATES GAS PROD. CO.
COMPLETED	11/08/70	09/25/68	02/05/73
SAMPLED	05/24/73	12/18/69	02/10/75
FORMATION	OLIG-VICKSBURG	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3320	9930	9890
WELLHEAD PRESSURE,PSIG	940	2863	2394
OPEN FLOW, MCFD	7799	3250	13100
COMPONENT, MOLE PCT			
METHANE	99.2	85.5	79.2
ETHANE	0.1	6.2	6.8
PROPANE	TRACE	2.4	6.0
N-BUTANE	0.0	0.5	1.5
ISOBUTANE	0.0	0.4	1.2
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.2	0.5
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.4	1.1	0.5
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.1	3.8
HELIUM	0.01	0.05	0.01
HEATING VALUE*	1007	1088	1206
SPECIFIC GRAVITY	0.558	0.665	0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 220 SAMPLE 9171	INDEX 221 SAMPLE 14580	INDEX 222 SAMPLE 12662
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	EDWARDS	FRANKLIN
FIELD	NOT GIVEN	COMPANARO E	W. A. MONCRIEF
WELL NAME	ADLEE PARR A NO. 4	PHILLIPS NO. 2	J. M. MITCHELL NO. 1
LOCATION	ANDRES GARCIA SAN ANDRES GRT	SEC. 3, BLK 16, GC&SFRR SUR.	S. S. PAYNE SUR. A-366
OWNER	SUPERIOR OIL CO.	NORTH AMERICAN ROYALTIES,INC	WESTLAND OIL DEVELOPMENT
COMPLETED	NOT GIVEN	04/12/74	05/11/68
SAMPLED	11/14/63	02/11/76	01/29/71
FORMATION	NOT GIVEN	PENN-CANYON	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	220	430	260
DEPTH, FEET	NOT GIVEN	3179	12200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	680	2880
OPEN FLOW, MCFD	NOT GIVEN	2800	63000
COMPONENT, MOLE PCT			
METHANE	90.7	89.8	34.3
ETHANE	4.7	2.8	6.3
PROPANE	1.9	1.5	3.7
N-BUTANE	0.6	0.3	1.5
ISOBUTANE	0.6	0.4	1.4
N-PENTANE	0.1	0.1	0.6
ISOPENTANE	0.3	0.1	0.5
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.8
NITROGEN	0.6	4.6	47.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	3.2
HELIUM	0.01	0.19	0.10
HEATING VALUE*	1063	1036	750
SPECIFIC GRAVITY	0.634	0.621	0.938

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 223 SAMPLE 12663	INDEX 224 SAMPLE 11619	INDEX 225 SAMPLE 11620
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FRANKLIN	FREESTONE	FREESTONE
FIELD	W. A. MONCRIEF	REED	REED
WELL NAME	MARY L. STANLEY NO. 1	RUBY MIDDLETON NO. 1	RUBY MIDDLETON NO. 1
LOCATION	W. B. JORDAN SUR. A-581	A. ANGLIN SUR. A-46	A. ANGLIN SUR. A-46
OWNER	WESTLAND OIL DEVELOPMENT	TEXACO INC.	TEXACO INC.
COMPLETED	09/14/68	05/27/67	05/27/67
SAMPLED	01/29/71	08/06/68	08/06/68
FORMATION	JURA-SMACKOVER	CRET-RODESSA	JURA-HAYNESVILLE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	12200	7255	11837
WELLHEAD PRESSURE,PSIG	2808	1815	6000
OPEN FLOW, MCFD	15000	3355	1671
COMPONENT, MOLE PCT			
METHANE	31.9	89.9	94.5
ETHANE	5.8	3.7	1.4
PROPANE	3.6	2.5	0.4
N-BUTANE	1.3	1.1	0.2
ISOBUTANE	1.3	0.5	TRACE
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.2	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	51.8	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.2	1.0	2.4
HELIUM	0.10	0.02	0.01
HEATING VALUE*	662	1141	1026
SPECIFIC GRAVITY	0.929	0.654	0.605

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 226 SAMPLE 12298	INDEX 227 SAMPLE 14879	INDEX 228 SAMPLE 14880
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	ALGOA	HASTING SE	HASTING SE
WELL NAME	ALLEN UNIT NO. 1	A. J. EASTHAM NO. 1	A. J. EASTHAM NO. 1
LOCATION	I&GN RR SUR. A-600	SEC. 5, I&GNRR SUR.A-622	SEC. 5, I&GNRR SUR. A-622
OWNER	GOODALE, BERTMAN & CO., INC.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	03/30/69	04/07/76	04/07/76
SAMPLED	NOT GIVEN	12/28/76	12/28/76
FORMATION	OLIG-FRIO	OLIG-F-46, SEG. A	OLIG-F-47, SEG. A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10240	9702	9837
WELLHEAD PRESSURE,PSIG	1600	3550	3150
OPEN FLOW, MCFD	110000	8000	8407
COMPONENT, MOLE PCT			
METHANE	93.7	93.2	92.0
ETHANE	2.3	4.1	4.3
PROPANE	0.7	1.0	1.3
N-BUTANE	0.1	0.3	0.3
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.5	0.1	0.2
OXYGEN	0.3	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1025	1074	1077
SPECIFIC GRAVITY	0.596	0.605	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 229 SAMPLE 14977	INDEX 230 SAMPLE 15464	INDEX 231 SAMPLE 12511
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GOLIAD	GOLIAD
FIELD	HASTING SE	BIG OAK	CLIP
WELL NAME	EMMA RUEGE NO. 1	W. P. PITTMAN NO. 1	B. B. GAYLE NO. 5-F
LOCATION	SEC. 5, BS&F SUR., A-625	MARIA JESUS DELEON SUR. A-22	IGNACIO GUAJARDO SUR. A-127
OWNER	CROWN CENTRAL PETROLEUM	LIGHTNING OIL CO.	DOW CHEMICAL CO.
COMPLETED	06/05/75	09/20/77	12/19/68
SAMPLED	04/--/77	10/31/78	11/03/70
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9266	2585	2684
WELLHEAD PRESSURE,PSIG	3400	950	957
OPEN FLOW, MCFD	12000	5000	4030
COMPONENT, MOLE PCT			
METHANE	92.7	98.2	97.7
ETHANE	3.9	0.1	0.0
PROPANE	1.2	TRACE	TRACE
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.4	1.3	1.6
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.4	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1087	997	990
SPECIFIC GRAVITY	0.615	0.569	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 232 SAMPLE 12512	INDEX 233 SAMPLE 12514	INDEX 234 SAMPLE 13540
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	CLIP	CLIP	SWICKHEIMER
WELL NAME	B. B. GAYLE NO. 5-H	B. B. GAYLE NO. 5-J	G.G. SWICKHEIMER NO. 2
LOCATION	IGNACIO GUARJARDO SUR. A-127	IGNACIO GUAJARDO SUR. A-127	J.P. FERRELL SUR. A-356
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	INEXCO OIL CO.
COMPLETED	12/19/68	10/30/70	01/22/71
SAMPLED	11/03/70	11/03/70	02/20/73
FORMATION	OLIG-FRIO U	MIOC-L	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2296	1500	2759
WELLHEAD PRESSURE,PSIG	787	590	1005
OPEN FLOW, MCFD	8400	1500	1460
COMPONENT, MOLE PCT			
METHANE	99.2	97.0	98.2
ETHANE	0.0	0.0	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.4	2.8	1.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1005	983	997
SPECIFIC GRAVITY	0.558	0.565	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 235 SAMPLE 12553	INDEX 236 SAMPLE 12594	INDEX 237 SAMPLE 12595
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAYSON	GREGG	GREGG
FIELD	NEW MAG	WILLOW SPRINGS	WILLOW SPRINGS
WELL NAME	NEW MAG UNIT NO. 12-1	J. M. ROBERTSON NO. 3	E. D. ROBERTSON NO. A-2
LOCATION	NOT GIVEN	A. FERGUSON SUR. A-75	ALEXANDER-FERGUSON SUR. A-76
OWNER	CHEVRON OIL CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	07/28/61	10/29/69	02/23/59
SAMPLED	11/27/70	12/18/70	12/16/70
FORMATION	ORDO-OILCREEK	CRET-TRAVIS PEAK	CRET-PETTIT
GEOLOGIC PROVINCE CODE	350	260	260
DEPTH, FEET	12776	7451	7294
WELLHEAD PRESSURE,PSIG	4200	2938	560
OPEN FLOW, MCFD	3860	4028	1761
COMPONENT, MOLE PCT			
METHANE	84.3	91.9	90.6
ETHANE	8.2	3.8	4.3
PROPANE	4.3	0.9	1.4
N-BUTANE	0.8	0.2	0.5
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	1.1	1.3	0.8
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.1	1.1
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1179	1059	1102
SPECIFIC GRAVITY	0.672	0.615	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 238 SAMPLE 12596	INDEX 239 SAMPLE 13917	INDEX 240 SAMPLE 13798
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GREGG	HANSFORD	HARRIS
FIELD	WILLOW SPRINGS	HART RANCH	GREENS BAYOU
WELL NAME	B. A. SKIPPER NO. B-1	HART NO. 1	HCHSC NAV. DSTR. NO. 1
LOCATION	MARSHALL-MANN SUR. A-256	SEC. 5, BLK. 5-T, T&NO SUR.	RICHARD&ROBERT VINCE SUR A76
OWNER	LONE STAR PRODUCING CO.	COLORADO INTERSTATE GAS CO.	INEXCO OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	02/20/72
SAMPLED	12/16/70	02/18/74	11/05/73
FORMATION	CRET-RODESSA	PENN-CLEVELAND	OLIG-FRIO & VICKSBURG
GEOLOGIC PROVINCE CODE	260	360	220
DEPTH, FEET	7326	5994	7024
WELLHEAD PRESSURE,PSIG	476	1390	2687
OPEN FLOW, MCFD	8500	3300	15000
COMPONENT, MOLE PCT			
METHANE	88.6	85.2	79.3
ETHANE	4.3	6.9	9.7
PROPANE	1.7	3.6	5.7
N-BUTANE	0.7	1.1	1.5
ISOBUTANE	0.8	0.4	1.6
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.1	0.3	0.8
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.6	0.1	0.4
NITROGEN	1.5	1.9	0.3
OXYGEN	0.2	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.2	0.3
HELIUM	0.01	0.13	TRACE
HEATING VALUE*	1129	1157	1304
SPECIFIC GRAVITY	0.663	0.669	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 241 SAMPLE 14668	INDEX 242 SAMPLE 14610	INDEX 243 SAMPLE 15741
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	BUFFALO WALLOW	CANADIAN W	CIRCLE DOT
WELL NAME	MEEKS NO. 1-54	JOHN C. ISAACS JR. "J" NO. 2	NAPECO LOCKE NO. 1
LOCATION	SEC. 54, BLK. M1, H&GN SUR.	SEC. 2, BLK. A, LOUT SUR.	SEC. 85, BLK. M1, H&GN SUR.
OWNER	NORTHERN NATURAL GAS EXPL.	DIAMOND SHAMROCK CORP.	NAPECO, INC.
COMPLETED	03/11/76	02/04/76	NOT GIVEN
SAMPLED	02/26/76	03/05/76	08/31/79
FORMATION	PERM-GRANITE WASH	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11271	13069	13982
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4395	NOT GIVEN
OPEN FLOW, MCFD	21000	11800	5700
COMPONENT, MOLE PCT			
METHANE	85.2	95.5	95.3
ETHANE	8.6	1.0	1.9
PROPANE	3.3	0.1	0.4
N-BUTANE	0.7	TRACE	0.1
ISOBUTANE	0.5	TRACE	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.8	0.3	0.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.8	1.2
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1161	988	1026
SPECIFIC GRAVITY	0.663	0.587	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 244 SAMPLE 10847	INDEX 245 SAMPLE 14801	INDEX 246 SAMPLE 9920
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	FELDMAN	MATHERS	MCQUIDDY
WELL NAME	MCQUIDDY B NO. 1	MATHERS NO. 1	MCQUIDDY A NO. 2
LOCATION	SEC. 3, BLK. 1, G&M SUR.	SEC. 132, BLK. 42, H&TC SUR.	JOHN GATES SUR.
OWNER	PHILLIPS PETROLEUM CO.	NATURAL GAS ANADARKO, INC.	PHILLIPS PETROLEUM CO.
COMPLETED	06/08/66	02/12/76	02/02/65
SAMPLED	01/23/67	10/08/76	06/13/65
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7332	6249	7228
WELLHEAD PRESSURE,PSIG	1808	1563	1781
OPEN FLOW, MCFD	20500	6900	5300
COMPONENT, MOLE PCT			
METHANE	82.1	76.2	83.0
ETHANE	9.3	10.5	8.6
PROPANE	4.4	6.1	3.7
N-BUTANE	1.1	1.6	0.9
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.4	3.7	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.8
HELIUM	0.08	0.17	0.09
HEATING VALUE*	1206	1232	1164
SPECIFIC GRAVITY	0.696	0.736	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 247 SAMPLE 14906	INDEX 248 SAMPLE 14936	INDEX 249 SAMPLE 10866
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	NOT GIVEN	PARSELL SE	RAMP
WELL NAME	RAMP NO. 1	MITCHELL UNIT NO. 1	N. C. PYEATT NO. 1
LOCATION	SEC. 26, BLK. 41, H&TC SUR.	SEC. 128, BLK. 42, H&TC SUR.	SEC. 51, BLK. A-1, H&GN SUR.
OWNER	WESSELY ENERGY CORP.	PETROLEUM INC.	SUN OIL CO.
COMPLETED	10/23/75	06/11/75	11/22/66
SAMPLED	02/15/77	03/10/77	02/09/67
FORMATION	NOT GIVEN	PENN-MORROW U	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11729	10343	11172
WELLHEAD PRESSURE,PSIG	7321	3576	3155
OPEN FLOW, MCFD	6350	3100	4396
COMPONENT, MOLE PCT			
METHANE	90.9	86.5	66.5
ETHANE	5.8	7.9	12.6
PROPANE	1.6	2.8	8.4
N-BUTANE	0.3	0.6	4.3
ISOBUTANE	0.4	0.5	2.1
N-PENTANE	0.0	0.2	1.0
ISOPENTANE	0.1	0.2	2.1
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	TRACE	0.2	1.1
NITROGEN	0.4	TRACE	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.3
HELIUM	0.02	0.04	0.02
HEATING VALUE*	1094	1159	1537
SPECIFIC GRAVITY	0.618	0.661	0.905

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 250 SAMPLE 15805	INDEX 251 SAMPLE 12614	INDEX 252 SAMPLE 12615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HENDERSON	HENDERSON
FIELD	SNOOKS	OPELIKA	OPELIKA
WELL NAME	MATHERS NO. 1	C. H. ALLYN NO. 1-C	G.W.WOFFORD NO. 1
LOCATION	SEC.132, BLK. 42, H&TC SUR.	ADRIAN ANGLIN SOUTH SUR.	G. ACOSTA SUR.
OWNER	NATURAL GAS AMADARKO, INC.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	03/25/79	NOT GIVEN	NOT GIVEN
SAMPLED	10/12/79	12/29/70	12/29/70
FORMATION	PENN-MORROW	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	360	260	260
DEPTH, FEET	11188	7850	9049
WELLHEAD PRESSURE,PSIG	5115	500	1150
OPEN FLOW, MCFD	5300	37172	5400
COMPONENT, MOLE PCT			
METHANE	96.8	82.9	90.5
ETHANE	0.8	4.3	2.8
PROPANE	0.2	1.7	0.8
N-BUTANE	0.0	0.5	0.2
ISOBUTANE	0.0	0.5	0.4
N-PENTANE	0.0	0.3	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.4	0.2
NITROGEN	0.4	6.6	3.2
OXYGEN	0.0	1.3	0.6
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	1.5	1.1
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1000	1032	1022
SPECIFIC GRAVITY	0.581	0.676	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 253 SAMPLE 12616	INDEX 254 SAMPLE 12610	INDEX 255 SAMPLE 13864
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HENDERSON	HENDERSON	HIDALGO
FIELD	OPELIKA	TRI-CITIES	JAVELINA
WELL NAME	J. S. EDWARDS NO. 1	TEXIE YOUNG B NO. 2	LAND&TRUST CO. NO. 8
LOCATION	J. GRAFF SUR.	JOSEPH RICE SUR.	DAVID DAVIS SUR. A-135
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	SHELL OIL CO.
COMPLETED	NOT GIVEN	09/28/59	04/05/72
SAMPLED	12/29/70	12/28/70	01/14/73
FORMATION	CRET-PETTIT	CRET-TRAVIS PEAK	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	9574	9760	11282
WELLHEAD PRESSURE,PSIG	600	630	7875
OPEN FLOW, MCFD	400000	2503	53000
COMPONENT, MOLE PCT			
METHANE	85.5	97.5	89.7
ETHANE	3.9	0.5	6.0
PROPANE	1.5	0.1	1.9
N-BUTANE	0.5	0.0	0.4
ISOBUTANE	0.5	0.0	0.7
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.3	0.0	0.3
NITROGEN	5.4	0.9	0.3
OXYGEN	1.2	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.3
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1037	999	1134
SPECIFIC GRAVITY	0.656	0.571	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 256 SAMPLE 12587	INDEX 257 SAMPLE 12588	INDEX 258 SAMPLE 12589
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	JEFFRESS	JEFFRESS	JEFFRESS
WELL NAME	J. D. JEFFRESS ESTATE NO. 1	G. G. ZAMORA ST. OF TEX NO.1	PETER VAN SCHERPE JR. NO.2
LOCATION	F. H. KIRKBRIDE SUR. 488	W. D. PARCHMAN SUR. 883	M. CANO PORC. 45, A-58
OWNER	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	04/14/69	09/15/69	05/15/69
SAMPLED	NOT GIVEN	12/--/70	12/--/70
FORMATION	OLIG-VICKSBURG U	OLIG-VICKSBURG T	OLIG-6300" SD.
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11318	9694	6298
WELLHEAD PRESSURE,PSIG	8298	6215	3540
OPEN FLOW, MCFD	37800	14000	9400
COMPONENT, MOLE PCT			
METHANE	88.6	90.6	54.5
ETHANE	5.9	5.6	3.4
PROPANE	1.8	1.8	1.2
N-BUTANE	0.2	0.4	0.5
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.9	0.6	20.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.2
HYDROGEN	0.0	0.0	8.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.1	10.7
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1086	1117	744
SPECIFIC GRAVITY	0.639	0.628	0.766

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 259 SAMPLE 13862	INDEX 260 SAMPLE 13863	INDEX 261 SAMPLE 13871
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	MCALLEN RANCH	MCCOOK E	SAL-DEL-REY
WELL NAME	A.A. MCALLEN NO. 32	T.H. THESIS NO. 1	H.SCHALEBEN NO. 1
LOCATION	SAN RAMON GRANT	SEC. 6, LGE. 2, NEWMAN'S SUB	NOT GIVEN
OWNER	SHELL OIL CO.	SHELL OIL CO.	GEORGE MITCHELL & ASSOC. INC
COMPLETED	08/30/72	03/04/72	09/16/71
SAMPLED	01/14/73	01/14/74	01/18/74
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2398	12081	8031
WELLHEAD PRESSURE,PSIG	9436	9140	2940
OPEN FLOW, MCFD	20500	63000	7800
COMPONENT, MOLE PCT			
METHANE	89.0	90.7	96.0
ETHANE	6.3	5.6	2.3
PROPANE	2.2	1.7	0.4
N-BUTANE	0.5	0.3	TRACE
ISOBUTANE	0.8	0.6	0.2
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.3	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.5	0.3	0.9
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1148	1117	1036
SPECIFIC GRAVITY	0.646	0.626	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 262 SAMPLE 14786	INDEX 263 SAMPLE 13577	INDEX 264 SAMPLE 11250
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOUSTON	HUTCHINSON	IRION
FIELD	TRINITY	NOT GIVEN	DOVE CREEK
WELL NAME	SOUTHLAND PAPER MILLS NO. 1	JACKSON NO. A-1	WINTERBOTHAM D NO. 1
LOCATION	S. P. GLENN SUR. A-472	SEC. 71, BLK.R, B&B SUR.	SEC. 27, BLK. 21, H&TC SUR.
OWNER	ARMOUR PROPERTIES	LEAR PETROLEUM CORP.	SKELLY OIL CO.
COMPLETED	01/30/75	NOT GIVEN	04/14/66
SAMPLED	03/--/76	04/16/73	12/28/67
FORMATION	CRET-WOODBINE	PENN-MORROW L	PENN-CANYON C
GEOLOGIC PROVINCE CODE	260	440	430
DEPTH, FEET	8562	NOT GIVEN	6432
WELLHEAD PRESSURE,PSIG	3262	NOT GIVEN	2190
OPEN FLOW, MCFD	15300	NOT GIVEN	3100
COMPONENT, MOLE PCT			
METHANE	79.6	92.0	74.4
ETHANE	5.4	3.9	9.7
PROPANE	0.9	1.7	4.9
N-BUTANE	0.2	0.4	1.3
ISOBUTANE	0.1	0.3	0.5
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	0.2	0.7
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.3
NITROGEN	12.3	0.8	7.3
OXYGEN	1.0	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.4	0.4
HELIUM	0.02	0.09	0.14
HEATING VALUE*	905	1091	1177
SPECIFIC GRAVITY	0.665	0.619	0.741

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 265 SAMPLE 11251	INDEX 266 SAMPLE 15446	INDEX 267 SAMPLE 13929
STATE	TEXAS	TEXAS	TEXAS
COUNTY	IRION	JACKSON	JACKSON
FIELD	DOVE CREEK	CARANCAHUA E	GANADO
WELL NAME	WINTERBOTHAM D NO. 1	R. B. TRULL NO. 2	BERTHA COPSEY NO. 3
LOCATION	SEC. 27, BLK. 21, H&TC SUR.	PATRICK GREEN SUR. A-25	GEORGE SOUTHERLAND SUR. A-75
OWNER	SKELLY OIL CO.	DOW CHEMICAL CO.	R. H. ENGELKE
COMPLETED	03/14/66	10/22/76	12/20/72
SAMPLED	12/28/67	10/19/78	02/26/74
FORMATION	PENN-CANYON D	MIOC-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	6473	1873	5678
WELLHEAD PRESSURE,PSIG	2245	810	1943
OPEN FLOW, MCFD	4600	8600	8500
COMPONENT, MOLE PCT			
METHANE	75.6	91.6	98.9
ETHANE	9.4	3.6	0.1
PROPANE	4.1	1.7	0.1
N-BUTANE	1.1	0.4	0.0
ISOBUTANE	0.5	0.7	0.0
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.1	0.3	0.0
HEXANES PLUS	0.3	0.5	0.0
NITROGEN	7.7	0.7	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	0.16	0.01	0.01
HEATING VALUE*	1140	1128	1006
SPECIFIC GRAVITY	0.722	0.635	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 268 SAMPLE 15581	INDEX 269 SAMPLE 15582	INDEX 270 SAMPLE 10125
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	LA WARD N	LA WARD N	MAUDE B. TRAYLOR N
WELL NAME	T. A. GRAVES NO. 5	T. A. GRAVES NO. 5	W. L. TRAYLOR NO. 2
LOCATION	PATRICK SCOTT SUR. A-69	PATRICK SCOTT SUR. A-69	HUGH MCGUFFIN SUR. A-43
OWNER	PETRO-LEWIS CORP.	PETRO-LEWIS CORP.	SUPERIOR OIL CO.
COMPLETED	03/03/77	03/03/77	11/12/63
SAMPLED	03/19/79	NOT GIVEN	09/16/65
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO JO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5856	6092	9210
WELLHEAD PRESSURE,PSIG	2000	2125	NOT GIVEN
OPEN FLOW, MCFD	9400	19500	7904
COMPONENT, MOLE PCT			
METHANE	94.2	93.8	87.5
ETHANE	3.2	2.9	6.9
PROPANE	0.8	1.2	2.2
N-BUTANE	0.3	0.3	0.5
ISOBUTANE	0.3	0.3	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.3	0.6	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1084	1076	1141
SPECIFIC GRAVITY	0.605	0.605	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 271 SAMPLE 15181	INDEX 272 SAMPLE 14894	INDEX 273 SAMPLE 13494
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JEFFERSON	JEFFERSON
FIELD	SANDY CREEK	GILBERT RANCH	HIGH ISLAND
WELL NAME	W. B. FOWLER NO. 5	GILBERT ESTATE NO. 1	TEXAS BLOCK 14-L NO. 1
LOCATION	S.C.A. ROGERS SUR. A-65	JOHN RICORD SUR. A-189	TEXAS BLOCK 14-L OFFSHORE
OWNER	FRED W. SHIELD	KILROY CO. OF TEXAS, INC.	SUPERIOR OIL CO.
COMPLETED	07/06/75	11/15/74	11/30/71
SAMPLED	01/05/78	01/30/77	12/20/72
FORMATION	OLIG-FRIO	OLIG-NODOSARIA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4705	8632	9426
WELLHEAD PRESSURE,PSIG	1800	2251	3590
OPEN FLOW, MCFD	13500	25304	14700
COMPONENT, MOLE PCT			
METHANE	97.5	93.3	94.5
ETHANE	1.1	3.4	3.1
PROPANE	0.3	1.3	0.8
N-BUTANE	0.1	0.4	0.2
ISOBUTANE	0.0	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.2	0.4	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.5
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1036	1089	1060
SPECIFIC GRAVITY	0.577	0.611	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 274 SAMPLE 13495	INDEX 275 SAMPLE 10827	INDEX 276 SAMPLE 13872
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	LAMB	LAVACA
FIELD	HIGH ISLAND	WILDCAT	VIENNA
WELL NAME	TEXAS BLOCK 14-L NO. 1	EVA WELLS NO. 1	JOE KAHANEK NO. 3
LOCATION	TEXAS BLOCK 14-L OFFSHORE	STATE CAPITOL LANDS	M. MULDOON SUR. A-34
OWNER	SUPERIOR OIL CO.	VAUGHN PETROLEUM CO.	GEORGE MITCHELL & ASSOC. INC
COMPLETED	11/30/71	NOT GIVEN	03/28/73
SAMPLED	12/20/72	NOT GIVEN	01/18/74
FORMATION	MIOC-	NOT GIVEN	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	435	220
DEPTH, FEET	10077	2615	3243
WELLHEAD PRESSURE,PSIG	5405	NOT GIVEN	1385
OPEN FLOW, MCFD	122000	NOT GIVEN	16000
COMPONENT, MOLE PCT			
METHANE	93.0	0.2	99.2
ETHANE	3.1	0.0	0.1
PROPANE	0.8	0.0	TRACE
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.8	99.2	0.3
OXYGEN	0.3	0.2	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	TRACE	0.00	0.01
HEATING VALUE*	1037	2	1007
SPECIFIC GRAVITY	0.599	0.969	0.559

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 277 SAMPLE 13857	INDEX 278 SAMPLE 12576	INDEX 279 SAMPLE 12575
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LEON	LEON
FIELD	WORD N	BUFFALO	LEON
WELL NAME	ANNIE BROWN ET AL. NO. 1	EMMA B. PAGE NO. 1	PAGE ESTATE NO. C-1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	SUPERIOR OIL CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	06/09/72	NOT GIVEN	02/13/51
SAMPLED	12/27/73	12/08/70	12/08/70
FORMATION	EOCE-WILCOX	CRET-WOODBINE	CRET-RODESSA
GEOLOGIC PROVINCE CODE	220	260	260
DEPTH, FEET	8115	5496	8799
WELLHEAD PRESSURE,PSIG	2818	1400	1240
OPEN FLOW, MCFD	14800	NOT GIVEN	1476
COMPONENT, MOLF PCT			
METHANE	85.4	97.6	91.6
ETHANE	6.4	0.7	0.8
PROPANE	3.5	0.4	0.2
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.8	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.3	0.6	4.3
OXYGEN	TRACE	0.0	0.9
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	0.6	2.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1147	1012	947
SPECIFIC GRAVITY	0.676	0.570	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 280 SAMPLE 12574	INDEX 281 SAMPLE 13404	INDEX 282 SAMPLE 14983
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LIBERTY	LIPSCOMB
FIELD	OAKWOOD	QUINN	BRADFORD
WELL NAME	C. M. HALEY	U.S. PLYWOOD ET AL NO. 1	OLA O. PIPER NO. 3
LOCATION	NOT GIVEN	REUBIN HARROW SUR. A-136	SEC. 688, BLK. 43, H&TC SUR.
OWNER	LONE STAR PRODUCING CO.	MCCORMICK OIL & GAS CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	12/07/61	06/30/71	02/02/77
SAMPLED	12/08/70	09/26/72	05/01/77
FORMATION	CRET-WOODBINE	EOCE-YEGUA	PENN-MORROW
GEOLOGIC PROVINCE CODE	260	220	360
DEPTH, FEET	5814	7524	9859
WELLHEAD PRESSURE, PSIG	1400	1270	3090
OPEN FLOW, MCFD	2840	13000	1800
COMPONENT, MOLE PCT			
METHANE	95.3	88.0	96.3
ETHANE	1.8	5.7	1.1
PROPANE	0.7	2.2	0.2
N-BUTANE	0.2	0.5	0.1
ISOBUTANE	0.3	0.4	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	0.8	1.6	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.1	1.6
HELIUM	0.02	0.01	0.06
HEATING VALUE*	1047	1095	1007
SPECIFIC GRAVITY	0.594	0.641	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 283 SAMPLE 14984	INDEX 284 SAMPLE 9900	INDEX 285 SAMPLE 8691
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	HIGGINS S	HIGGINS W
WELL NAME	OLA O. PIPER NO. 3	ROY SANSING NO. 1	LILLIAN M. ADDIE NO. 1
LOCATION	SEC. 68A, BLK. 43, H&TC SUR.	SEC. 88, BLK. 43, H&TC SUR.	SEC. 161, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/02/77	03/22/65	04/10/62
SAMPLED	05/01/77	05/19/65	10/03/62
FORMATION	PENN-CLEVELAND	PENN-TONKAWA	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7646	7584	11539
WELLHEAD PRESSURE,PSIG	2075	NOT GIVEN	3986
OPEN FLOW, MCFD	6000	7500	8300
COMPONENT, MOLE PCT			
METHANE	90.4	83.4	96.6
ETHANE	5.8	5.6	0.7
PROPANE	1.6	4.5	0.1
N-BUTANE	0.4	1.0	0.1
ISOBUTANE	TRACE	0.7	TRACE
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.8	3.9	0.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	2.2
HELIUM	0.05	0.11	TRACE
HEATING VALUE*	1088	1132	997
SPECIFIC GRAVITY	0.620	0.678	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 286 SAMPLE 8951	INDEX 287 SAMPLE 14236	INDEX 288 SAMPLE 14738
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	HIGGINS W	HIGGINS W	HORSE CREEK NW
WELL NAME	JESS R. BUSSARD NO. 1	MAY M. WRIGHT E NO. 1-163	BROADDUS NO. 1
LOCATION	SEC. 162, BLK. 43, H&TC SUR.	SEC. 163, BLK. 43, H&TC SUR.	SEC. 293, BLK. 43, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	01/31/63	10/01/74	NOT GIVEN
SAMPLED	05/01/63	11/24/74	08/19/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10564	10660	10920
WELLHEAD PRESSURE,PSIG	3776	3950	3580
OPEN FLOW, MCFD	23500	5200	4500
COMPONENT, MOLE PCT			
METHANE	90.2	88.8	96.9
ETHANE	5.9	6.1	1.2
PROPANE	1.5	1.8	0.3
N-BUTANE	0.4	0.2	0.0
ISOBUTANE	TRACE	0.4	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.3	0.6	0.0
CYCLOPENTANE	0.1	0.3	0.0
HEXANES PLUS	0.1	0.4	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.9
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1094	1133	1011
SPECIFIC GRAVITY	0.625	0.649	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 289 SAMPLE 14594	INDEX 290 SAMPLE 15849	INDEX 291 SAMPLE 13788
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	NORTHRUP	NOT GIVEN	WILDCAT
WELL NAME	WALLACE N. HAMKER NO. 1	BENSCH NO. 1	REDELSPERGER NO. 1
LOCATION	SEC. 589, BLK. 43, H&TC SUR.	SEC. 946,BLK.43,H&TC SUR.	SEC. 900, BLK 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	COTTON PETROLEUM CO.	COTTON PETROLEUM CORP.
COMPLETED	11/25/75	NOT GIVEN	04/17/73
SAMPLED	03/04/76	12/05/79	10/30/73
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7485	7600	7516
WELLHEAD PRESSURE,PSIG	1815	1400	1802
OPEN FLOW, MCFD	6500	1350	2700
COMPONENT, MOLE PCT			
METHANE	85.7	86.0	85.7
ETHANE	6.5	5.9	6.1
PROPANE	3.6	3.7	4.2
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.2	1.5	1.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.10	0.11	0.11
HEATING VALUE*	1163	1163	1167
SPECIFIC GRAVITY	0.668	0.670	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 292 SAMPLE 14249	INDEX 293 SAMPLE 13356	INDEX 294 SAMPLE 12108
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIVE OAK	MATAGORDA
FIELD	WILDCAT	MAXINE NE	LUCKY W
WELL NAME	ALEX BORN ET AL NO. A-1	CHARLES LINDHOLM NO. 1	R. P. DAWDY NO. 1-A
LOCATION	SEC. 332, BLK. 43, H&TC SUR.	R. W. FANT SUR, A615	BOWMAN & REESE SUR. A-8
OWNER	DIAMOND SHAMROCK CORP.	PRAIRIE PRODUCING CO.	J. M. HUBER CORP.
COMPLETED	11/19/74	11/11/71	06/09/68
SAMPLED	12/28/74	08/18/72	11/09/69
FORMATION	PENN-CLEVELAND	EOCE-WILCOX	OLIG-FRIO F-12
GEOLOGIC PROVINCE CODE	360	220	220
DEPTH, FEET	8140	8010	9202
WELLHEAD PRESSURE,PSIG	1947	3825	3300
OPEN FLOW, MCFD	13000	6600	7000
COMPONENT, MOLE PCT			
METHANE	82.6	84.6	92.7
ETHANE	7.8	7.2	3.0
PROPANE	4.6	4.1	1.3
N-BUTANE	1.4	0.9	0.3
ISOBUTANE	0.7	0.7	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	1.3	0.5	0.9
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.4	0.7
HELIUM	0.10	TRACE	TRACE
HEATING VALUE*	1216	1168	1062
SPECIFIC GRAVITY	0.703	0.682	0.606

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 295 SAMPLE 13449	INDEX 296 SAMPLE 12801	INDEX 297 SAMPLE 13403
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MIDLAND	MONTGOMERY
FIELD	PETRUCHA	WAR-SAN	PAUL NELSON W
WELL NAME	PETRUCHA GAS UNIT NO. 2	MIDLAND A FEE NO. 5	CHARLES M. THOMAS NO. 1
LOCATION	DUGOLD MCFARLAND SUR. A-61	NOT GIVEN	WILLIAM WILLS SUR. A-594
OWNER	AMOCO PRODUCTION CO.	TEXACO INC.	MCCORMICK OIL & GAS CORP.
COMPLETED	03/02/71	NOT GIVEN	06/24/71
SAMPLED	10/03/72	04/28/71	09/26/72
FORMATION	OLIG-FRIO	DEVO-	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	430	220
DEPTH, FEET	12645	11893	7556
WELLHEAD PRESSURE,PSIG	7339	1508	1465
OPEN FLOW, MCFD	10288	1240	20800
COMPONENT, MOLE PCT			
METHANE	89.9	61.4	85.3
ETHANE	4.8	18.0	6.6
PROPANE	1.9	11.7	2.7
N-BUTANE	0.4	3.4	0.6
ISOBUTANE	0.4	1.3	0.5
N-PENTANE	0.1	0.6	0.1
ISOPENTANE	0.1	0.6	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.2	1.8	3.0
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.7	0.9
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1087	1472	1103
SPECIFIC GRAVITY	0.634	0.875	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 298 SAMPLE 13541	INDEX 299 SAMPLE 14318	INDEX 300 SAMPLE 13223
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NACOGDOCHES	OCHILTREE	OCHILTREE
FIELD	DOUGLASS	BULER N	PAN PETRO
WELL NAME	CROSSMAN "A" NO. 1	GLORIA GRIFFIN NO. 1	URBAN NO. 1
LOCATION	JEFFERSON WILSON SUR. A-59	SEC. 67, BLK. 13, T&NO SUR.	SEC. 93, BLK. 13, T+NO SUR.
OWNER	INEXCO OIL CO.	COTTON PETROLEUM CORP.	COTTON PETROLEUM CO.
COMPLETED	10/05/72	NOT GIVEN	12/15/71
SAMPLED	02/--/73	04/16/75	05/31/72
FORMATION	CRET-PETTIT U	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	260	360	360
DEPTH, FEET	8972	8501	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3874	2102	1400
OPEN FLOW, MCFD	2500	2620	10500
COMPONENT, MOLE PCT			
METHANE	96.4	85.5	88.0
ETHANE	1.1	6.4	6.5
PROPANE	0.3	3.7	2.7
N-BUTANE	0.1	0.9	0.6
ISOBUTANE	0.1	0.4	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.5	1.9	0.9
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.4	0.5
HELIUM	0.01	0.08	0.12
HEATING VALUE*	1016	1143	1123
SPECIFIC GRAVITY	0.584	0.665	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 301 SAMPLE 15295	INDEX 302 SAMPLE 12653	INDEX 303 SAMPLE 12654
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	PARKER	PARKER
FIELD	WYATT	MEEKER	MEEKER
WELL NAME	LESLIE NO. 1	O. E. DOSS	ED W. PEARSON
LOCATION	SEC. 134, BLK. 43, H&TC SUR.	NOT GIVEN	NOT GIVEN
OWNER	HORIZON O & G CO. OF TEXAS	MEEKER & CO.	MEEKER & CO.
COMPLETED	10/23/77	NOT GIVEN	NOT GIVEN
SAMPLED	05/30/78	01/30/71	01/30/70
FORMATION	PENN-MORROW	PENN-ATOKA U	PENN-BRYSON
GEOLOGIC PROVINCE CODE	360	420	420
DEPTH, FEET	10072	3850	2200
WELLHEAD PRESSURE,PSIG	3523	500	500
OPEN FLOW, MCFD	2800	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	22.9	79.2	86.1
ETHANE	16.6	8.1	4.1
PROPANE	27.0	5.5	2.1
N-BUTANE	14.6	1.4	0.6
ISOBUTANE	6.7	0.9	0.3
N-PENTANE	3.8	0.5	0.1
ISOPENTANE	5.3	0.3	0.1
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	2.3	0.3	0.1
NITROGEN	0.0	3.2	6.0
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.2
HELIUM	TRACE	0.14	0.25
HEATING VALUE*	2471	1221	1044
SPECIFIC GRAVITY	1.477	0.726	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 304 SAMPLE 12655	INDEX 305 SAMPLE 14638	INDEX 306 SAMPLE 12115
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PECOS	PECOS
FIELD	MEEKER	DAMERON	NOT GIVEN
WELL NAME	A. F. BOYD NO. B	SIDLO NO. 2	NEAL ESTATE NO. 1
LOCATION	NOT GIVEN	SEC. 18, BLK. 3, H&TC SUR.	SEC. 14, BLK. 142, T&STL SUR
OWNER	MEEKER & CO.	GEORGE H. MITCHELL	WM. MOSS PROPERTIES, INC.
COMPLETED	NOT GIVEN	08/13/74	12/11/68
SAMPLED	01/30/71	04/19/76	11/15/69
FORMATION	PENN-ATOKA L	PERM-CLEARFORK	PERM-CAPITAN
GEOLOGIC PROVINCE CODE	420	430	430
DEPTH, FEET	4000	3227	3060
WELLHEAD PRESSURE,PSIG	600	1000	1200
OPEN FLOW, MCFD	200	3800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.5	89.5	88.8
ETHANE	8.0	5.2	3.5
PROPANE	4.8	1.7	1.1
N-BUTANE	1.0	0.5	0.2
ISOBUTANE	0.5	0.2	0.1
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.3	0.8	5.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	1.0	0.0
CARBON DIOXIDE	0.1	0.7	0.4
HELIUM	0.15	0.01	0.04
HEATING VALUE*	1175	1088	1020
SPECIFIC GRAVITY	0.694	0.630	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 307 SAMPLE 12116	INDEX 308 SAMPLE 13091	INDEX 309 SAMPLE 13092
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	NOT GIVEN	PETCO	PETCO
WELL NAME	NEAL ESTATE NO. 1	NEAL ESTATE NO. 1	NEAL ESTATE NO. 1
LOCATION	SEC. 14, BLK. 142, T&STL SUR	SEC.22,BLK.142,T&STL RR SUR.	SEC.22,BLK.142,T&STL RR SUR.
OWNER	WM. MOSS PROPERTIES, INC.	THE PETROLEUM CORP.	THE PETROLEUM CORP.
COMPLETED	12/11/68	05/17/70	05/17/70
SAMPLED	11/13/69	10/21/71	10/21/71
FORMATION	PERM-YATES	DEVO-	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2846	11128	13717
WELLHEAD PRESSURE,PSIG	1300	4031	4818
OPEN FLOW, MCFD	6000	15500	22200
COMPONENT, MOLE PCT			
METHANE	87.7	92.7	96.1
ETHANE	3.6	3.0	1.6
PROPANE	1.5	1.0	0.5
N-BUTANE	0.4	0.4	0.2
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.0	1.6	0.7
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.2
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.6	0.4
HELIUM	0.05	0.02	0.03
HEATING VALUE*	1035	1049	1039
SPECIFIC GRAVITY	0.632	0.605	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 310 SAMPLE 12756	INDEX 311 SAMPLE 12812	INDEX 312 SAMPLE 13783
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	POLK
FIELD	PUCKETT N	TCI	SEVEN OAKS N
WELL NAME	H. A. WIMBERLY NO. 2	O. W. WILLIAMS NET-11	SOUTHLAND PAPER MILLS NO.B-2
LOCATION	SEC. 4, BLK. 100	SEC. 13, BLK. 3, H&TC SUR.	H+TC RR SUR. A-314
OWNER	HASSIE HUNT TRUST	TEXACO INC.	GEORGE MITCHELL & ASSOC.
COMPLETED	--/--/62	NOT GIVEN	06/08/72
SAMPLED	04/06/71	04/30/71	10/26/73
FORMATION	ORDO-ELLENBURGER	PERM-GRAYBURG	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	430	430	220
DEPTH, FEET	10004	2084	12450
WELLHEAD PRESSURE,PSIG	2750	376	2200
OPEN FLOW, MCFD	11400	340	3425
COMPONENT, MOLE PCT			
METHANE	91.9	85.1	74.5
ETHANE	2.6	6.7	8.2
PROPANE	1.0	2.5	5.3
N-BUTANE	0.3	0.7	2.2
ISOBUTANE	0.2	0.2	1.9
N-PENTANE	0.2	0.3	1.1
ISOPENTANE	TRACE	0.1	1.3
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	0.2	0.2	1.4
NITROGEN	1.7	1.8	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	1.2	0.0
CARBON DIOXIDE	1.8	1.1	3.3
HELIUM	0.05	0.02	0.01
HEATING VALUE*	1039	1116	1367
SPECIFIC GRAVITY	0.618	0.667	0.831

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 313 SAMPLE 8388	INDEX 314 SAMPLE 11549	INDEX 315 SAMPLE 11777
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	NOT GIVEN	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 2R	BIVINS 30R	BIVINS 33R
LOCATION	SEC. 21, BLK. 0-18, D&P SUR.	SEC. 31, BLK. 0-18, D&P SUR.	SEC. 72, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	NOT GIVEN	NOT GIVEN	02/13/69
SAMPLED	01/31/62	06/23/68	02/27/69
FORMATION	NOT GIVEN	NOT GIVEN	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	700	2069
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	319
OPEN FLOW, MCFD	NOT GIVEN	800	5600
COMPONENT, MOLE PCT			
METHANE	77.4	72.2	72.8
ETHANE	8.2	5.1	9.2
PROPANE	3.8	3.1	5.9
N-BUTANE	0.8	1.0	2.2
ISOBUTANE	0.5	0.4	1.3
N-PENTANE	0.1	0.1	1.0
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	8.3	16.4	5.8
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	0.0
HYDROGEN	0.2	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.30	1.02	0.00
HEATING VALUE*	1087	976	1281
SPECIFIC GRAVITY	0.701	0.709	0.787

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 316 SAMPLE 13588	INDEX 317 SAMPLE 14687	INDEX 318 SAMPLE 14688
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	ATHEN	CHAPMAN	CHAPMAN
WELL NAME	SPENCER NO. 1	A.T. RANDOLPH G.U. NO. 1	A.T. RANDOLPH G.U. NO. 1
LOCATION	SEC. 33, BLK. 55, T&P SUR.	SEC. 34, BLK. 57, T-2 T&P SR	SEC. 34, BLK. 57, T-2 T&P SR
OWNER	COASTAL STATES GAS CO.	GULF ENERGY & MINERALS CO.	GULF ENERGY & MINERALS CO.
COMPLETED	12/06/72	09/22/74	09/17/74
SAMPLED	04/20/73	06/04/76	06/04/76
FORMATION	NOT GIVEN	SILU-FUSSELMAN	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12911	15499	12884
WELLHEAD PRESSURE,PSIG	4600	5353	6664
OPEN FLOW, MCFD	22000	19600	25025
COMPONENT, MOLE PCT			
METHANE	88.7	96.6	98.0
ETHANE	0.3	0.3	0.6
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	1.0	0.9	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	9.9	2.0	1.0
HELIUM	0.02	0.03	0.01
HEATING VALUE*	906	985	1006
SPECIFIC GRAVITY	0.657	0.579	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 319 SAMPLE 12375	INDEX 320 SAMPLE 12422	INDEX 321 SAMPLE 12551
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	GREASEWOOD	GREASEWOOD	GREASEWOOD
WELL NAME	CORNELL KNIGHT NO. 1	CORNELL KNIGHT NO. 1	CORNELL KNIGHT NO. 1
LOCATION	SEC. 9, BLK. C-19, PSL SUR.	SEC. 9, BLK. C19, PSL SUR.	SEC. 9, BLK. C19, P&L SUR.
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	09/22/68	09/22/68	09/22/68
SAMPLED	08/19/70	09/23/70	11/19/70
FORMATION	DEVO-	DEVO-	SILU-DEVO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16293	16293	16293
WELLHEAD PRESSURE,PSIG	5800	5777	5777
OPEN FLOW, MCFD	37000	37000	37000
COMPONENT, MOLE PCT			
METHANE	93.3	93.6	93.4
ETHANE	0.4	0.4	0.4
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	0.9	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	5.6	5.0	5.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	952	956	954
SPECIFIC GRAVITY	0.613	0.608	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 322 SAMPLE 10612	INDEX 323 SAMPLE 14473	INDEX 324 SAMPLE 12811
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	HAMON	L.N.D.	ROJO CABALLOS W
WELL NAME	WAPLES PLATTER	PECOS UNIT NO. 1	TXL REEVES STATE UNIT
LOCATION	SEC. 22, BLK. 50, T1S	SEC. 29,BLK.4,H&GNRR SUR.	SEC. 20, BLK. 49, T&PRR SUR.
OWNER	JAKE L. HAMON	TEXAS WEST OIL & GAS CORP.	TEXACO INC.
COMPLETED	--/--/65	NOT GIVEN	06/19/66
SAMPLED	06/14/66	10/03/75	NOT GIVEN
FORMATION	ORDO-ELLENBURGER	PENN-ATOKA	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	20450	15218	20520
WELLHEAD PRESSURE,PSIG	6700	8950	6877
OPEN FLOW, MCFD	50000	44000	375000
COMPONENT, MOLE PCT			
METHANE	90.0	95.2	94.9
ETHANE	0.3	0.4	0.3
PROPANE	0.0	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.7	0.4	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.0	3.9	4.0
HELIUM	0.02	0.01	0.02
HEATING VALUE*	917	974	969
SPECIFIC GRAVITY	0.647	0.597	0.599

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 325 SAMPLE 13542	INDEX 326 SAMPLE 15077	INDEX 327 SAMPLE 11187
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	RUSK	SCHLEICHER
FIELD	CREE FLOWERS	RUFUS	CODY BELL
WELL NAME	FLOWERS "A" NO. 1	KANGERGA NO. 1	C. M. BELL NO. 1
LOCATION	SEC. 79, BLK.C, G&M SUR.	JOHN M. WHITE SUR. A-813	SEC. 10, BLK. LL, TCRR SUR.
OWNER	HELMERICH & PAYNE, INC.	HINTON PRODUCTION CO.	SKELLY OIL CO.
COMPLETED	07/05/72	10/01/75	08/23/67
SAMPLED	02/19/73	08/12/77	10/23/67
FORMATION	PENN-DOUGLAS	CRET-PETTIT	PENN-CANYON D
GEOLOGIC PROVINCE CODE	360	260	430
DEPTH, FEET	6287	7256	6445
WELLHEAD PRESSURE,PSIG	1645	2581	2122
OPEN FLOW, MCFD	5200	14000	3000
COMPONENT, MOLE PCT			
METHANE	79.9	85.0	74.7
ETHANE	8.7	5.2	8.9
PROPANE	5.1	2.5	5.8
N-BUTANE	1.3	1.3	1.2
ISOBUTANE	0.5	1.1	0.9
N-PENTANE	0.3	0.9	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.9	0.2
NITROGEN	3.6	1.5	6.6
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.1	0.9
HELIUM	0.16	0.02	0.12
HEATING VALUE*	1189	1197	1173
SPECIFIC GRAVITY	0.705	0.702	0.741

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 328 SAMPLE 11032	INDEX 329 SAMPLE 11033	INDEX 330 SAMPLE 10852
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	ELDORADO	ELDORADO	ELDORADO N
WELL NAME	L. I. WHITTEN NO. 1	L. I. WHITTEN NO. 1	MATTIE ROYSTER NO. 1
LOCATION	SEC. 25, BLK. LL, TCRR SUR.	SEC. 25, BLK. LL, TCRR SUR.	SEC. 23, BLK. LL, TCRY SUR.
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	08/13/66	06/23/66	08/18/66
SAMPLED	07/19/67	07/19/67	01/25/67
FORMATION	PENN-CANYON B	PENN-CANYON A	PENN-CANYON A
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6380	6199	6295
WELLHEAD PRESSURE,PSIG	2050	1960	2114
OPEN FLOW, MCFD	920	6600	7700
COMPONENT, MOLE PCT			
METHANE	74.2	31.1	75.5
ETHANE	8.6	20.4	9.2
PROPANE	5.9	29.9	5.4
N-BUTANE	1.8	6.7	1.3
ISOBUTANE	1.1	4.1	1.1
N-PENTANE	0.6	0.3	0.5
ISOPENTANE	0.9	2.6	0.1
CYCLOPENTANE	0.3	0.3	0.1
HEXANES PLUS	0.8	0.7	0.4
NITROGEN	5.3	2.8	5.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.7
HELIUM	0.13	0.04	0.13
HEATING VALUE*	1273	1991	1200
SPECIFIC GRAVITY	0.778	1.215	0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 331 SAMPLE 12768	INDEX 332 SAMPLE 15531	INDEX 333 SAMPLE 12171
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SHELBY	SHERMAN
FIELD	TOENATL	JOAQUIN	STRATFORD (WILDCAT)
WELL NAME	A. B. THOMERSON NO. 2	W. M. TAYLOR NO. 1	M. DORTCH NO. 1
LOCATION	20 MI. NE OF ELDORADO	S. O. PENNINGTON SUR., A-555	SEC. 25, BLK. 1-T, T&NO SUR.
OWNER	ATLANTIC RICHFIELD CO.	KEY PRODUCTION CO.	W. V. HARLOW ET AL.
COMPLETED	--/--/54	10/05/76	NOT GIVEN
SAMPLED	04/19/71	12/06/78	01/17/70
FORMATION	PENN-HARKEY	CRET-TRAVIS PEAK	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	430	260	360
DEPTH, FEET	4590	6192	1720
WELLHEAD PRESSURE,PSIG	490	2763	400
OPEN FLOW, MCFD	800	1500	206
COMPONENT, MOLE PCT			
METHANE	72.2	93.8	40.3
ETHANE	9.8	2.0	4.6
PROPANE	5.2	0.4	3.6
N-BUTANE	1.3	0.1	0.9
ISOBUTANE	0.7	0.1	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.6	0.0	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	9.1	2.3	48.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.0
HELIUM	0.25	0.02	0.75
HEATING VALUE*	1163	1018	647
SPECIFIC GRAVITY	0.749	0.593	0.842

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 334 SAMPLE 13754	INDEX 335 SAMPLE 14177	INDEX 336 SAMPLE 14248
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SMITH	STERLING
FIELD	WILDCAT	OVERTON	CONGER
WELL NAME	CALVIRD-A NO. 2	OVERTON G.U. 1 NO. 1	FOSTER CONGER NO. 1
LOCATION	SEC. 382, BLK. 1T, T&NO SUR.	M.G. HERIQUEZ SUR.	SEC. 5, BLK. 21, H&TCRR SUR.
OWNER	CITIES SERVICE OIL CO.	EXXON CO., U.S.A.	DORCHESTER EXPLORATION, INC.
COMPLETED	08/09/73	NOT GIVEN	05/31/74
SAMPLED	10/16/73	10/--/74	12/26/74
FORMATION	PENN-LIME	JURA-HAYNESVILLE	PENN-CANYON
GEOLOGIC PROVINCE CODE	360	260	430
DEPTH, FEET	3010	12000	7301
WELLHEAD PRESSURE,PSIG	84	5205	1735
OPEN FLOW, MCFD	13300	7800	7200
COMPONENT, MOLE PCT			
METHANE	68.0	95.9	70.2
ETHANE	6.6	0.7	9.6
PROPANE	4.8	0.1	9.1
N-BUTANE	1.5	TRACE	3.2
ISOBUTANE	0.7	TRACE	1.4
N-PENTANE	0.4	TRACE	0.9
ISOPENTANE	0.4	TRACE	0.9
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.2	0.1	0.7
NITROGEN	16.0	1.2	3.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.0	0.2
HELIUM	0.80	0.01	0.09
HEATING VALUE*	1054	992	1398
SPECIFIC GRAVITY	0.758	0.586	0.837

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 337 SAMPLE 12675	INDEX 338 SAMPLE 14170	INDEX 339 SAMPLE 12276
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	THROCKMORTON
FIELD	DENISON	NOT GIVEN	COUNTY REGULAR
WELL NAME	G. R. HILL NO. 1	HOLL NO.1	MATTHEWS RANCH NO. 5
LOCATION	SEC. 2, BLK. CC, DENISON SUR	SEC. 121, BLK. A, HE&WT SUR.	SEC. 25, BLK. 1-T, T&NO SUR.
OWNER	CONTINENTAL OIL CO.	PETROLEUM CORP.	C. E. JACOBS
COMPLETED	10/20/62	02/17/73	NOT GIVEN
SAMPLED	02/05/71	10/10/74	06/02/70
FORMATION	PENN-STRAWN	PENN-CANYON	PENN-AVIS
GEOLOGIC PROVINCE CODE	430	430	425
DEPTH, FEET	8138	5723	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1005	1440	NOT GIVEN
OPEN FLOW, MCFD	1343	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.7	82.7	72.8
ETHANE	1.8	8.2	1.2
PROPANE	0.2	3.6	0.6
N-BUTANE	0.0	0.8	0.2
ISOBUTANE	0.0	0.6	0.4
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	1.1	2.8	23.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.6	TRACE
HELIUM	0.05	0.10	0.84
HEATING VALUE*	1007	1153	813
SPECIFIC GRAVITY	0.582	0.682	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 340 SAMPLE 12277	INDEX 341 SAMPLE 12681	INDEX 342 SAMPLE 12682
STATE	TEXAS	TEXAS	TEXAS
COUNTY	THROCKMORTON	UPTON	UPTON
FIELD	COUNTY REGULAR	ADAMC	FRADEAN
WELL NAME	MATTHEWS RANCH NO. 28-B	ADAMC UNIT NO. D-362	KING RANCH O&L CO. NO. 6-1
LOCATION	SEC. 6, BLK. X, AB&M SUR.	SEC. 187, BLK.F, CCSD&RGNGRR	SEC. 26, BLK. 2, MK&TRR SUR.
OWNER	C. E. JACOBS	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	NOT GIVEN	NOT GIVEN	NOT GIVEN
SAMPLED	06/02/70	02/03/71	02/05/71
FORMATION	PENN-BLUFF CREEK	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	425	430	430
DEPTH, FEET	960	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.9	68.5	73.3
ETHANE	0.8	15.5	13.8
PROPANE	0.3	7.8	6.3
N-BUTANE	0.1	2.4	1.3
ISOBUTANE	0.2	1.0	1.1
N-PENTANE	TRACE	0.7	0.7
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	TRACE	0.3	0.5
NITROGEN	24.4	3.2	2.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.4	0.6
HELIUM	0.93	0.02	0.03
HEATING VALUE*	771	1351	1301
SPECIFIC GRAVITY	0.662	0.808	0.767

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 343 SAMPLE 12680	INDEX 344 SAMPLE 14905	INDEX 345 SAMPLE 15194
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	VAL VERDE,	VAL VERDE
FIELD	JACK HERBERT	DEVIL'S RIVER	WILL O
WELL NAME	MCELROY RANCH CO. L NO.8-U	J. V. DRISDALE NO. 1	EXXON MILLS NO. 1
LOCATION	SEC. 109, BLK.D, CCSD&RGNGRR	SEC.1,BLK.G,GWT&P SUR A-933	SEC.16, BLK.Q4,TCRR SUR.
OWNER	GULF OIL CORP.	NATIONAL EXPLORATION CO.	C & K PETROLEUM, INC.
COMPLETED	NOT GIVEN	04/13/75	07/10/76
SAMPLED	02/04/71	02/16/77	01/23/78
FORMATION	PENN-STRAWN	PENN-STRAWN	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	10223	14208
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	4826
OPEN FLOW, MCFD	NOT GIVEN	4635	9600
COMPONENT, MOLE PCT			
METHANE	76.8	95.4	85.9
ETHANE	11.1	0.3	0.2
PROPANE	5.8	TRACE	TRACE
N-BUTANE	1.8	0.0	0.0
ISOBUTANE	1.1	0.0	0.0
N-PENTANE	0.5	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.4	0.0	0.0
NITROGEN	1.7	0.9	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	3.3	13.2
HELIUM	0.03	0.06	0.03
HEATING VALUE*	1287	972	874
SPECIFIC GRAVITY	0.750	0.591	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 346 SAMPLE 12808	INDEX 347 SAMPLE 13108	INDEX 348 SAMPLE 14899
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WEBB
FIELD	BLOCK 17 SE	QUITO	LAREDO LOBO
WELL NAME	STATE OF TEXAS DC NO. 1	QUITO NO. 1	W. HUBBARD NO. 2
LOCATION	SEC. 3, BLK. 18, PSL SUR.	SEC. 210, BLK. 34, H&TC SUR.	14 MI. SE LAREDO
OWNER	TEXACO INC.	AMER. QUASAR PETROLEUM CO.	CONTINENTAL OIL CO.
COMPLETED	NOT GIVEN	06/11/71	07/05/75
SAMPLED	04/30/71	11/30/71	02/08/77
FORMATION	PERM-DELAWARE	SILU-FUSSELMAN	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	430	430	220
DEPTH, FEET	4972	14655	8427
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5861	1575
OPEN FLOW, MCFD	67	16000	82000
COMPONENT, MOLE PCT			
METHANE	87.6	93.7	90.0
ETHANE	5.8	0.4	5.8
PROPANE	1.9	0.1	1.6
N-BUTANE	0.5	0.0	0.3
ISOBUTANE	0.6	0.0	0.4
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	2.8	0.7	0.1
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	4.9	1.2
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	1104	959	1108
SPECIFIC GRAVITY	0.642	0.608	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 349 SAMPLE 9752	INDEX 350 SAMPLE 9753	INDEX 351 SAMPLE 10845
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	GAGEBY CREEK	GAGEBY CREEK	GAGEBY CREEK
WELL NAME	LEE C NO. 1	LEE C NO. 1	DYSON A NO. 1
LOCATION	SEC. 80, BLK. M-1, H&GN SUR.	SEC. 80, BLK. M-1, H&GN SUR.	SEC. 100, BLK.A-5, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	10/16/64	10/17/64	07/27/66
SAMPLED	02/22/65	02/22/65	01/23/67
FORMATION	ORDO-SIMPSON	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15982	15121	15009
WELLHEAD PRESSURE,PSIG	5380	5010	4990
OPEN FLOW, MCFD	21000	41000	740000
COMPONENT, MOLE PCT			
METHANE	97.1	94.9	94.8
ETHANE	0.5	1.2	1.2
PROPANE	0.2	0.3	0.4
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.7	1.2	1.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	2.0	2.2
HELIUM	0.05	0.03	0.03
HEATING VALUE*	1006	1002	992
SPECIFIC GRAVITY	0.575	0.593	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 352 SAMPLE 10846	INDEX 353 SAMPLE 12809	INDEX 354 SAMPLE 9951
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WINKLER	WINKLER
FIELD	GAGEBY CREEK	EMPERIOR	HALLEY
WELL NAME	DYSON A NO. 1	S. M. HALLEY NO. 10	S. M. HALLEY NO. 167
LOCATION	SEC. 100, BLK.A-5, H&GN SUR.	SEC. 7, BLK. B-11, PSL SUR.	SEC. 24, BLK. B-11
OWNER	PHILLIPS PETROLEUM CO.	TEXACO INC.	SKELLY OIL CO.
COMPLETED	NOT GIVEN	NOT GIVEN	11/--/64
SAMPLED	01/23/67	04/30/71	07/02/65
FORMATION	ORDO-SIMPSON	ORDO-WADDELL	DEVO-
GEOLOGIC PROVINCE CODE	360	430	430
DEPTH, FEET	15795	11032	9503
WELLHEAD PRESSURE,PSIG	5126	NOT GIVEN	3000
OPEN FLOW, MCFD	2450	230	16214
COMPONENT, MOLE PCT			
METHANE	96.7	85.5	84.4
ETHANE	0.8	7.4	7.3
PROPANE	0.2	3.1	2.7
N-BUTANE	0.0	1.0	0.9
ISOBUTANE	0.0	0.7	0.6
N-PENTANE	0.0	0.6	0.5
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.1	0.3
HEXANES PLUS	0.0	0.4	1.0
NITROGEN	0.5	1.2	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.1	1.1
HELIUM	0.04	0.04	TRACE
HEATING VALUE*	999	1186	1190
SPECIFIC GRAVITY	0.580	0.678	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 355 SAMPLE 9952	INDEX 356 SAMPLE 11661	INDEX 357 SAMPLE 8370
STATE	TEXAS	TEXAS	UTAH
COUNTY	WINKLER	WINKLER	EMERY
FIELD	HALLEY	WILDCAT	BOW KNOT
WELL NAME	S. M. HALLEY NO. 167	TUBB ESTATE NO. 1	BOW KNOT NO. 145
LOCATION	SEC. 24, BLK. B-11	SEC. 25, BLK C-23, PSL SUR.	SEC. 5, T26S, R17E
OWNER	SKELLY OIL CO.	SINCLAIR OIL & GAS CO.	SUPERIOR OIL CO.
COMPLETED	11/--/64	NOT GIVEN	NOT GIVEN
SAMPLED	07/02/65	10/04/68	01/17/62
FORMATION	ORDO-MONTOYA	ORDO-ELLENBURGER	MISS-
GEOLOGIC PROVINCE CODE	430	430	585
DEPTH, FEET	10432	21466	6270
WELLHEAD PRESSURE,PSIG	1863	NOT GIVEN	2420
OPEN FLOW, MCFD	4698	27000	300
COMPONENT, MOLE PCT			
METHANE	84.3	98.2	12.6
ETHANE	7.2	0.2	1.5
PROPANE	3.1	TRACE	1.0
N-BUTANE	0.9	0.0	0.4
ISOBUTANE	0.6	0.0	0.2
N-PENTANE	0.4	0.0	0.2
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.5	0.0	0.3
NITROGEN	1.6	0.3	79.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.2
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.2
CARBON DIOXIDE	1.3	1.2	2.7
HELIUM	TRACE	0.03	1.47
HEATING VALUE*	1160	999	200
SPECIFIC GRAVITY	0.685	0.568	0.943

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 358 SAMPLE 14272	INDEX 359 SAMPLE 14697	INDEX 360 SAMPLE 11764
STATE	UTAH	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UINTAH	BRAXTON	KANAWHA
FIELD	SEEP RIDGE	LITTLE BIRCH	SISSONVILLE
WELL NAME	TEXACO-SKYLINE GOV'T AF NO.	JACKSON NO. 1	CAVENDER ET AL. B-1
LOCATION	SEC. 27, T13S, R21E	NOT GIVEN	ELK DISTRICT
OWNER	TEXACO INC.	TEXAS INTERNATIONAL PET.	CITIES SERVICE OIL CO.
COMPLETED	NOT GIVEN	12/10/75	12/29/68
SAMPLED	02/15/75	06/04/76	02/14/69
FORMATION	CRET-DAKOTA	MISS-SQUAW	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	575	160	160
DEPTH, FEET	9670	1893	5793
WELLHEAD PRESSURE,PSIG	3000	580	2271
OPEN FLOW, MCFD	3000	NOT GIVEN	52000
COMPONENT, MOLE PCT			
METHANE	95.4	91.9	95.0
ETHANE	2.3	5.4	1.1
PROPANE	0.4	1.2	0.3
N-BUTANE	TRACE	0.2	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	TRACE	0.0
NITROGEN	0.3	0.6	3.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.1	0.1
HELIUM	0.02	0.06	0.11
HEATING VALUE*	1040	1077	990
SPECIFIC GRAVITY	0.592	0.603	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 361 SAMPLE 14690	INDEX 362 SAMPLE 14691	INDEX 363 SAMPLE 14693
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	20 MILE CREEK
WELL NAME	FEDERAL COAL NO. 4	BETHLEHEM NO. B-1	FEDERAL COAL NO. 13
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.
COMPLETED	NOT GIVEN	08/14/75	12/09/75
SAMPLED	06/04/76	06/04/76	06/04/76
FORMATION	NOT GIVEN	MISS-INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2471	1840	2612
WELLHEAD PRESSURE,PSIG	525	540	520
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.1	90.0	91.3
ETHANE	5.9	6.8	5.8
PROPANE	1.5	1.7	1.5
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.03	0.04	0.04
HEATING VALUE*	1098	1104	1089
SPECIFIC GRAVITY	0.613	0.619	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 364 SAMPLE 14695	INDEX 365 SAMPLE 14696	INDEX 366 SAMPLE 14698
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	20 MILE CREEK
WELL NAME	FEDERAL COAL NO. 16	BETHLEHEM NO. B-14	BETHLEHEM NO. B-17
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.
COMPLETED	05/15/75	09/17/75	NOT GIVEN
SAMPLED	06/04/76	06/04/76	06/04/76
FORMATION	DEVO-BLUE MONDAY	MISS-MAXTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2063	2267	NOT GIVEN
WELLHEAD PRESSURE,PSIG	675	420	560
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.9	91.0	94.3
ETHANE	4.2	5.7	3.3
PROPANE	1.1	1.5	0.6
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.3	0.2	0.1
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.9	0.8	1.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.09	0.08	0.15
HEATING VALUE*	1075	1089	1044
SPECIFIC GRAVITY	0.605	0.611	0.588

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 367 SAMPLE 14699	INDEX 368 SAMPLE 14700	INDEX 369 SAMPLE 14701
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	20 MILE CREEK
WELL NAME	FEDERAL COAL NO. 6	BLANTON NO. 1	BETHLEHEM NO. B-25
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.
COMPLETED	01/04/75	05/10/75	08/28/75
SAMPLED	06/04/76	06/04/76	06/04/76
FORMATION	MISS-INJUN	MISS-INJUN	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2454	1898	2212
WELLHEAD PRESSURE,PSIG	540	545	625
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.3	90.9	90.1
ETHANE	6.0	6.1	6.5
PROPANE	1.7	1.5	1.7
N-BUTANE	0.4	0.3	0.4
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	0.5	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.03	0.04	0.04
HEATING VALUE*	1104	1096	1107
SPECIFIC GRAVITY	0.621	0.612	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 370 SAMPLE 14692	INDEX 371 SAMPLE 14694	INDEX 372 SAMPLE 9677
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	PRESTON
FIELD	PETERS CREEK	PETERS CREEK	HORTON
WELL NAME	WALKER NO. 1	KEENAN NO. 1	USA-N-1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATIONAL PET.	TEXAS INTERNATIONAL PET.	CITIES SERVICE OIL CO.
COMPLETED	10/18/75	11/06/75	02/07/63
SAMPLED	06/04/76	06/04/76	12/16/64
FORMATION	MISS-MAXTON	MISS-MAXTON	SILU-TUSCARORA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1865	1216	7180
WELLHEAD PRESSURE,PSIG	190	190	1800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	696
COMPONENT, MOLE PCT			
METHANE	92.3	90.5	76.8
ETHANE	5.2	6.5	1.8
PROPANE	1.1	1.5	0.3
N-BUTANE	0.2	0.3	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.6	0.6	20.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.04	0.05	0.46
HEATING VALUE*	1080	1103	818
SPECIFIC GRAVITY	0.603	0.620	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 373 SAMPLE 14845	INDEX 374 SAMPLE 14846	INDEX 375 SAMPLE 14851
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	MORGANTOWN QUADRANGLE	MORGANTOWN QUADRANGLE	MORGANTOWN QUADRANGLE
WELL NAME	H. J. RENE	PRESTON CO. COAL NO. 484	PRESTON CO. COAL NO. 478
LOCATION	VALLEY DISTRICT	VALLEY DISTRICT	VALLEY DISTRICT
OWNER	RAY RESOURCES CORP.	RAY RESOURCES CORP.	RAY RESOURCES CORP.
COMPLETED	NOT GIVEN	12/04/74	11/18/74
SAMPLED	11/01/76	11/01/76	NOT GIVEN
FORMATION	NOT GIVEN	DEVO-HUNTERSVILLE	DEVO-HUNTERSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	7792	7682
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3037	5165
COMPONENT, MOLE PCT			
METHANE	97.4	97.6	97.5
ETHANE	1.7	1.6	1.7
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1021	1020	1021
SPECIFIC GRAVITY	0.568	0.567	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 376 SAMPLE 14852	INDEX 377 SAMPLE 14820	INDEX 378 SAMPLE 9432
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	MORGANTOWN QUADRANGLE	NOT GIVEN	PARSONS
WELL NAME	PRESTON CO. COAL NO. 474	B.M. MORGAN NO. 481	USA-Q-1
LOCATION	VALLEY DISTRICT	MORGANTOWN QUADRANGLE	NOT GIVEN
OWNER	RAY RESOURCES CORP.	RAY RESOURCES CORP.	CITIES SERVICE OIL CO.
COMPLETED	12/04/74	11/18/75	03/17/64
SAMPLED	NOT GIVEN	10/25/76	07/01/64
FORMATION	DEVO-HUNTERSVILLE	DEVO-HUNTERVILLE	SILU-TUSCARORA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7792	7861	7058
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2620
OPEN FLOW, MCFD	3037	2919	16300
COMPONENT, MOLE PCT			
METHANE	97.5	97.3	78.7
ETHANE	1.7	1.7	1.8
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.5	18.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.02	0.02	0.42
HEATING VALUE*	1021	1019	835
SPECIFIC GRAVITY	0.568	0.565	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 379 SAMPLE 9676	INDEX 380 SAMPLE 13158	INDEX 381 SAMPLE 12852
STATE	WEST VIRGINIA	WEST VIRGINIA	WYOMING
COUNTY	TUCKER	TUCKER	CAMPBELL
FIELD	HORTON	NOT GIVEN	WILDCAT
WELL NAME	USA-T-1	MULLENAX NO. A-1	USA NO. 1-2
LOCATION	NOT GIVEN	PARSONS QUADRANGLE	SEC. 2, T57N, R76W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	08/21/64	12/11/71	05/28/71
SAMPLED	12/16/64	02/29/72	NOT GIVEN
FORMATION	SILU-TUSCARORA	SILU-TUSCARORA	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	515
DEPTH, FEET	6822	5455	7423
WELLHEAD PRESSURE,PSIG	2630	2645	NOT GIVEN
OPEN FLOW, MCFD	22000	28000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.4	79.0	63.3
ETHANE	1.8	1.8	6.8
PROPANE	0.2	0.2	13.1
N-BUTANE	0.0	0.1	6.0
ISOBUTANE	0.0	0.0	2.7
N-PENTANE	0.0	0.1	0.7
ISOPENTANE	0.0	0.0	3.2
CYCLOPENTANE	0.0	0.2	0.5
HEXANES PLUS	0.0	0.3	0.9
NITROGEN	17.9	17.1	2.6
OXYGEN	TRACE	0.4	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.42	0.41	0.01
HEATING VALUE*	842	869	1628
SPECIFIC GRAVITY	0.540	0.653	0.969

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 382 SAMPLE 14237	INDEX 383 SAMPLE 11791	INDEX 384 SAMPLE 14551
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	FREMONT	LINCOLN
FIELD	BLUE GAP	PONY CREEK	WILLOW CREEK
WELL NAME	BLUD GAP UNIT II	PONY CREEK UNIT NO. 1	ARNOLD LARSON NO. 1
LOCATION	SEC. 7, T14N, R92W	SEC. 1, T37N, R91W	SEC. 2, T24N, R114W
OWNER	CIG EXPLORATION, INC.	BUTTES GAS & OIL CO.	RAINBOW RESOURCES, INC.
COMPLETED	09/13/74	10/17/68	07/09/75
SAMPLED	11/22/74	03/11/69	11/04/75
FORMATION	CRET-MESAVERDE	EOCE-FORT UNION	CRET-HILLIARD
GEOLOGIC PROVINCE CODE	535	530	535
DEPTH, FEET	9126	8842	2430
WELLHEAD PRESSURE,PSIG	3875	2600	1250
OPEN FLOW, MCFD	3980	1000	2000
COMPONENT, MOLE PCT			
METHANE	87.1	61.3	81.3
ETHANE	5.6	19.5	11.0
PROPANE	2.0	8.8	4.4
N-BUTANE	0.5	1.6	0.7
ISOBUTANE	0.6	2.3	0.7
N-PENTANE	0.1	0.5	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.4	0.1
NITROGEN	0.1	0.0	1.7
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	5.0	TRACE
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1108	1384	1196
SPECIFIC GRAVITY	0.668	0.871	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 385 SAMPLE 14616	INDEX 386 SAMPLE 14511	INDEX 387 SAMPLE 15188
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	KINNEY	TABLE ROCK	TABLE ROCK
WELL NAME	KINNEY UNIT NO. 2	TABLE ROCK UNIT NO. 19	TABLE ROCK UNIT NO. 22
LOCATION	SEC. 18, T13N, R99W	SEC. 35, T19N, R98W	SEC. 2, T18N, R98W
OWNER	MOUNTAIN FUEL SUPPLY CO.	NEUMIN PRODUCTION CO.	TEXACO INC.
COMPLETED	10/01/75	NOT GIVEN	11/01/77
SAMPLED	02/25/76	10/24/75	01/10/78
FORMATION	CRET-DAKOTA	MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14015	19000	18116
WELLHEAD PRESSURE,PSIG	8745	5200	NOT GIVEN
OPEN FLOW, MCFD	2915	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.0	73.7	75.1
ETHANE	0.3	2.0	2.0
PROPANE	TRACE	0.5	0.4
N-BUTANE	0.0	0.3	0.2
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	4.8	4.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	2.2	1.3
CARBON DIOXIDE	3.2	15.8	15.8
HELIUM	0.01	0.29	0.30
HEATING VALUE*	978	836	836
SPECIFIC GRAVITY	0.589	0.768	0.758

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 388 SAMPLE 8716	INDEX 389 SAMPLE 14669	INDEX 390 SAMPLE 11259
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	UINTA
FIELD	WILDCAT	WILDCAT	CHURCH BUTTES
WELL NAME	GOVT. ROWLAND NO. 1	BLACK ROCK FEDERAL NO. A-1	UNIT NO. 19
LOCATION	SEC. 2, T19N, R100W	SEC. 14, T23N, R99W	SEC. 8, T16N, R112W
OWNER	CHANDLER & BYLLESBY, INC.	ANADARKO PRODUCTION CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	NOT GIVEN	03/08/73	NOT GIVEN
SAMPLED	10/02/62	05/07/76	01/18/68
FORMATION	NOT GIVEN	CRET-LEWIS	PENN-MORGAN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	6825	17740
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1933	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.1	84.4	51.8
ETHANE	0.4	6.6	6.9
PROPANE	0.3	4.1	1.2
N-BUTANE	0.1	1.1	0.7
ISOBUTANE	0.1	0.9	0.3
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.3	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.3	2.0	10.6
OXYGEN	0.0	0.0	0.9
ARGON	0.0	TRACE	0.1
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	3.7
CARBON DIOXIDE	2.4	0.2	22.9
HELIUM	0.01	0.02	0.17
HEATING VALUE*	1001	1182	763
SPECIFIC GRAVITY	0.588	0.686	0.923

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 5. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES DURING 1960 - 1979

	INDEX 391 SAMPLE 14708	INDEX 392 SAMPLE 15010	INDEX 393 SAMPLE 14707
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	WILDCAT	WILDCAT	YELLOW CREEK
WELL NAME	AMOCO GULF WI UNIT NO. 1	BRUFF UNIT NO. 4	AMOCO GULF WI UNIT NO. 1
LOCATION	SEC. 2, T14N, R121W	SEC. 17, T18N, R112W	SEC. 2, T14N, R121W
OWNER	AMOCO & GULF	AMOCO PRODUCTION CO.	AMOCO & GULF
COMPLETED	NOT GIVEN	04/11/77	NOT GIVEN
SAMPLED	06/10/76	05/20/77	06/09/76
FORMATION	JURA-TWIN CREEK	CRET-FRONTIER	JURA-TWIN CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5260	11514	5260
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2750	4024	2750
COMPONENT, MOLE PCT			
METHANE	77.6	93.8	77.5
ETHANE	8.7	3.5	8.8
PROPANE	4.1	0.4	4.0
N-BUTANE	1.3	0.3	1.3
ISOBUTANE	1.2	0.1	1.2
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.5	0.1	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	5.7	1.2	5.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.08	0.02	0.08
HEATING VALUE*	1186	1064	1188
SPECIFIC GRAVITY	0.724	0.600	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 6. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1960 - 1979

	INDEX 1 SAMPLE 14308	INDEX 2 SAMPLE 15853	INDEX 3 SAMPLE 12135
STATE	ALABAMA	ARKANSAS	KANSAS
COUNTY	ESCAMBIA	LINCOLN	ELLSWORTH
FIELD	BIG ESCAMBIA CREEK	GULF COAST AREA	NOT GIVEN
PLANT NAME	MALLARD EXPLORATION CO.	GLENDALE COMPRESSOR STA.	NOT GIVEN
LOCATION	6 IN. TO MALLARD PLANT	24 INCH	NOT GIVEN
OWNER	EXXON CO., U.S.A.	MISSISSIPPI RIVER TRANS. CO.	NORTHERN HELEX CO.
SAMPLED	03/19/75	12/11/79	12/05/69
FORMATION	JURA-SMACKOVER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	240	385
PRESSURE,PSIG	640	608	NOT GIVEN
FLOW,MCFD	1400	417000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.7	96.2	76.4
ETHANE	14.6	2.1	5.8
PROPANE	18.7	0.4	2.9
N-BUTANE	11.8	0.1	1.0
ISOBUTANE	7.4	0.1	0.0
N-PENTANE	3.0	0.1	0.0
ISOPENTANE	4.2	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.8	0.1	0.0
NITROGEN	1.5	0.5	13.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	TRACE
HELIUM	0.01	TRACE	0.40
HEATING VALUE*	2129	1039	987
SPECIFIC GRAVITY	1.273	0.582	0.680

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 6. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1960 - 1979

	INDEX 4 SAMPLE 13250	INDEX 5 SAMPLE 13251	INDEX 6 SAMPLE 13252
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
PLANT NAME	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.	OLPE COMPRESSOR STA.
LOCATION	100 LINE	200 LINE	300 LINE
OWNER	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	NOT GIVEN	06/08/72	06/08/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
PRESSURE,PSIG	560	782	897
FLOW,MCFD	188	342000	417000
COMPONENT, MOLE PCT			
METHANE	84.8	86.2	76.3
ETHANE	5.9	5.4	7.7
PROPANE	1.2	1.0	4.3
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	TRACE	0.1	0.3
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	7.8	6.7	10.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.02	0.11	0.02
HEATING VALUE*	999	1003	1063
SPECIFIC GRAVITY	0.630	0.625	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 6. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1960 - 1979

	INDEX 7 SAMPLE 13253	INDEX 8 SAMPLE 7380	INDEX 9 SAMPLE 13231
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYONS	MORTON	SEWARD
FIELD	NOT GIVEN	GREENWOOD	HUGOTON
PLANT NAME	OLPE COMPRESSOR STA.	GREENWOOD DISCH	LIBERAL COMPRESSOR STA.
LOCATION	400 LINE	SEC. 18, T33S, R43W	GRANT CO. INLET
OWNER	PANHANDLE EASTERN PL. CO.	COLORADO INTERSTATE GAS CO.	PANHANDLE EASTERN PL. CO.
SAMPLED	06/08/72	02/04/60	06/05/72
FORMATION	NOT GIVEN	PENN-VIRGIL	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	360	360
PRESSURE,PSIG	826	750	509
FLOW,MCFD	777	NOT GIVEN	761000
COMPONENT, MOLE PCT			
METHANE	81.5	52.3	71.6
ETHANE	4.7	8.1	6.3
PROPANE	0.9	9.0	4.0
N-BUTANE	0.1	5.6	1.2
ISOBUTANE	0.1	2.2	0.6
N-PENTANE	TRACE	2.2	0.4
ISOPENTANE	TRACE	2.2	0.3
CYCLOPENTANE	TRACE	0.5	0.1
HEXANES PLUS	0.1	2.0	0.4
NITROGEN	9.6	15.5	14.6
OXYGEN	1.8	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.1	0.2
HELIUM	0.03	0.40	0.21
HEATING VALUE*	945	1477	1057
SPECIFIC GRAVITY	0.652	1.010	0.739

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 6. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1960 - 1979

	INDEX 10 SAMPLE 13232	INDEX 11 SAMPLE 13419	INDEX 12 SAMPLE 13413
STATE	KANSAS	TEXAS	TEXAS
COUNTY	SEWARD	HANSFORD	MOORE
FIELD	HUGOTON	HUGOTON, TEXAS & OKLA.	NOT GIVEN
PLANT NAME	LIBERAL COMPRESSOR STA.	SHER-HAN	DUMAS COMPRESSOR STA.
LOCATION	SEWARD CO LINE	SHERMAN HELIUM PLANT INLET	HELIUM PLT. SUPPLY
OWNER	PANHANDLE EASTERN PL. CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/05/72	10/04/72	10/05/72
FORMATION	NOT GIVEN	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	440
PRESSURE,PSIG	190	365	200
FLOW,MCFD	16200	200000	300000
COMPONENT, MOLE PCT			
METHANE	82.1	71.6	72.6
ETHANE	8.6	7.0	7.3
PROPANE	2.2	4.3	4.7
N-BUTANE	0.2	1.3	1.5
ISOBUTANE	0.2	0.6	0.7
N-PENTANE	TRACE	0.4	0.4
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	6.0	13.8	11.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.30	0.55	0.54
HEATING VALUE*	1056	1058	1097
SPECIFIC GRAVITY	0.651	0.732	0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 6. - SAMPLES FROM PIPELINES IN THE UNITED STATES DURING 1960 - 1979

	INDEX 13 SAMPLE 13781	INDEX 14 SAMPLE 12072
STATE	TEXAS	TEXAS
COUNTY	MOORE	PECOS
FIELD	NOT GIVEN	GOMEZ & GRAY RANCH
PLANT NAME	DUMAS-PHILLIPS PLANT	NOT GIVEN
LOCATION	DUMAS PHILLIPS PLANT INLET	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	COASTAL STATES GAS PROD. CO.
SAMPLED	10/26/73	10/01/69
FORMATION	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	430
PRESSURE,PSIG	NOT GIVEN	900
FLOW,MCFD	NOT GIVEN	235000
COMPONENT, MOLE PCT		
METHANE	74.1	96.4
ETHANE	6.9	0.2
PROPANE	4.5	TRACE
N-BUTANE	1.3	0.0
ISOBUTANE	0.7	0.0
N-PENTANE	0.3	0.0
ISOPENTANE	0.3	0.0
CYCLOPENTANE	0.1	0.0
HEXANES PLUS	0.2	0.0
NITROGEN	11.0	0.3
OXYGEN	0.0	0.0
ARGON	TRACE	TRACE
HYDROGEN	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0
CARBON DIOXIDE	TRACE	3.0
HELIUM	0.52	0.02
HEATING VALUE*	1098	980
SPECIFIC GRAVITY	0.725	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 7. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES DURING 1960 - 1979

	INDEX 1 SAMPLE 14455	INDEX 2 SAMPLE 9187	INDEX 3 SAMPLE 9188
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	LANAWAY	WILDCAT	WILDCAT
WELL NAME	LANAWAY NO G-1	SINCLAIR MILLICENT NO. 10-5	SINCLAIR MILLICENT NO. 10-5
LOCATION	10-32-35-4 W5M	SEC. 5, T21, R13W	SEC. 5, T21, R13W
OWNER	AMOCO CANADA PET. CO.	SINCLAIR CANADA OIL CO.	SINCLAIR CANADA OIL CO.
COMPLETED	NOT GIVEN	03/10/63	03/10/63
SAMPLED	06/05/75	10/--/63	10/--/63
FORMATION	CRET-	CRET-VIKING	-BLAIRMORE BASAL
DEPTH, FEET	7996	2592	3336
WELLHEAD PRESSURE,PSIG	2959	935	1466
OPEN FLOW, MCFD	NOT GIVEN	1300	8600
COMPONENT, MOLE PCT			
METHANE	79.2	92.2	92.1
ETHANE	11.1	2.8	1.9
PROPANE	4.9	1.3	0.5
N-BUTANE	0.8	0.3	0.1
ISOBUTANE	0.8	0.1	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	1.6	2.6	3.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	0.9
HELIUM	0.01	0.00	0.10
HEATING VALUE*	1213	1040	1008
SPECIFIC GRAVITY	0.714	0.605	0.606

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 7. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES DURING 1960 - 1979

	INDEX 4 SAMPLE 8962	INDEX 5 SAMPLE 14163	INDEX 6 SAMPLE 14164
COUNTRY	CANADA	THAILAND	THAILAND
STATE OR PROVINCE	SASKATCHEWAN	NOT GIVEN	NOT GIVEN
FIELD	KINDERSLEY	WILDCAT	WILDCAT
WELL NAME	KEWANEE KINDERSLEY	UNION NO. 13-1	UNION NO. 13-1
LOCATION	SEC. 5, T30, R25W3M	GULF OF THAILAND	GULF OF THAILAND
OWNER	CANADIAN KEWANEE LTD.	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA
COMPLETED	10/04/62	DRILL STEM TEST NO. 6	DRILL STEM TEST NO. 3
SAMPLED	05/09/63	05/18/74	05/14/74
FORMATION	-VICTORIA	TERT-	TERT-
DEPTH, FEET	838	5918	6892
WELLHEAD PRESSURE,PSIG	300	1765	2076
OPEN FLOW, MCFD	8500	8080	9510
COMPONENT, MOLE PCT			
METHANE	94.8	67.0	67.3
ETHANE	0.0	10.6	10.4
PROPANE	0.0	6.1	5.7
N-BUTANE	0.0	1.4	1.2
ISOBUTANE	0.0	1.6	1.4
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.6	0.6
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	4.9	0.6	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	11.4	11.9
HELIUM	0.04	TRACE	TRACE
HEATING VALUE*	960	1185	1152
SPECIFIC GRAVITY	0.578	0.854	0.845

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 7. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES DURING 1960 - 1979

	INDEX 7 SAMPLE 14165	INDEX 8 SAMPLE 14166	INDEX 9 SAMPLE 11150
COUNTRY	THAILAND	THAILAND	UNITED KINGDOM
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	NORTH SEA
FIELD	WILDCAT	WILDCAT	INDEFATIGABLE
WELL NAME	UNION NO. 13-1	UNION NO. 13-1	49/18-3
LOCATION	GULF OF THAILAND	GULF OF THAILAND	NOT GIVEN
OWNER	UNION OIL CO. OF CALIFORNIA	UNION OIL CO. OF CALIFORNIA	AMOCO U. K. PETROLEUM LTD.
COMPLETED	DRILL STEM TEST NO. 2	DRILL STEM TEST NO. 4	05/25/67
SAMPLED	05/12/74	05/16/74	08/17/67
FORMATION	TERT-	TERT-	PERM-ROTLIEGENDES
DEPTH, FEET	7730	6740	8824
WELLHEAD PRESSURE,PSIG	2123	2002	3391
OPEN FLOW, MCFD	5900	5500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.4	67.4	91.2
ETHANE	9.2	10.7	3.6
PROPANE	4.5	6.1	0.8
N-BUTANE	1.1	1.3	0.4
ISOBUTANE	1.1	1.5	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.4	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	1.1	0.8	3.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	14.6	11.2	0.5
HELIUM	TRACE	TRACE	0.05
HEATING VALUE*	1078	1171	1023
SPECIFIC GRAVITY	0.843	0.845	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 7. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES DURING 1960 - 1979

	INDEX 10 SAMPLE 11149		
COUNTRY.....	UNITED KINGDOM		
STATE OR PROVINCE.....	NORTH SEA		
FIELD.....	LEMAN		
WELL NAME.....	49/27-4		
LOCATION.....	NOT GIVEN		
OWNER.....	AMOCO U. K. PETROLEUM LTD.		
COMPLETED.....	05/25/67		
SAMPLED.....	10/09/67		
FORMATION.....	PERM-ROTLIEGENDES		
DEPTH, FEET.....	6547		
WELLHEAD PRESSURE,PSIG...	2572		
OPEN FLOW, MCFD.....	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE.....	93.1		
ETHANE.....	2.9		
PROPANE.....	0.4		
N-BUTANE.....	0.2		
ISOBUTANE.....	0.0		
N-PENTANE.....	0.0		
ISOPENTANE.....	0.0		
CYCLOPENTANE.....	0.0		
HEXANES PLUS.....	0.0		
NITROGEN.....	2.8		
OXYGEN.....	0.4		
ARGON.....	TRACE		
HYDROGEN.....	TRACE		
HYDROGEN SULFIDE**.....	0.0		
CARBON DIOXIDE.....	0.1		
HELIUM.....	0.02		
HEATING VALUE*.....	1012		
SPECIFIC GRAVITY.....	0.590		

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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